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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Elkoplasty,* (*ελκος Ulcer and πλασσω*); *or, Old Ulcers treated by Anaplasty.* (*Read before the Buffalo City Medical Association, June 27th,* 1854.) By FRANK H. HAMILTON, A.M., M.D., Professor of Surgery in the University of Buffalo, and Surgeon to the Buffalo Hospital of the Sisters of Charity.

SOME writer has said, "old ulcers in 1830 will be old ulcers in 1860," which, not to be understood always in a literal sense, was intended only to express, in a brief and pertinent form, the proverbial obstinacy of this class of sores.

In most cases, the integument has been broken and destroyed by ulceration, and then, usually, bad health, or, perhaps, enlarged veins, have helped to perpetuate the lesion. In other cases, however, the ulcers are directly in consequence of severe lacerating injuries, which have at once torn away the skin beyond the power of nature to repair; and that although the health of the body and of the limb may be perfect. In such cases, the refusal of the ulcers to heal is entirely owing to the extensive loss of integument.

Actual loss of skin is repaired by one or both of two processes. By the development of new, from or upon the free

margin of the old skin, or by the contraction of the granulations and of the cicatrix, in consequence of which, the adjacent skin is drawn towards the chasm, and made, as it were, to slide over and cover it in.

This rule admits of but few exceptions. Occasionally, after a very long delay, the granulations acquire the power of forming new skin at various and isolated points of the sore. This process may now and then be observed in the healing of extensive burns, or, perhaps, in the closing up of an ulcer whose surface is excluded from the air. New skin may even find a matrix in the periosteum, as I have witnessed, and maintained several years since. (*Buffalo Medical Journal*, vol. vii. p. 205.) But the conditions are very rare under which these exceptions can occur. The rule remains as we have stated, and if ulcers are not closed by either the projection of new skin from the margins of the old, or by the contraction of the granulations and cicatrix, then, usually, they must remain open. To the action of both of these processes there is, however, a limit. The formative power of the old skin does not extend beyond a few lines. The new vessels, becoming more and more attenuated as they stretch inward from the periphery, lose, at length, the power of generating epithelial cells, or, if formed, they are too imperfectly organized to sustain an existence, and they crumble away from the slightest provocation. Slowly, but perceptibly, the opaque diaphragm proceeds to shut in the granulations, and for a long time encourages a hope that a cure is to be accomplished. But just when the work is almost consummated, a rapid disintegration sweeps away in a few hours the patient labor of many months. Again and again the reluctant labor is renewed, and as often suddenly, and without provocation, is it arrested and broken up. At the same time the granulations have ceased to condense, and the cicatrix to contract, either because these actions have attained their natural limits, or because the adjacent skin has reached its utmost tension, and affords effectual resistance to further stretching. Here the process of closure forever ends, and the "old ulcers of 1830 will be old ulcers in 1860."

Nature has done its utmost, and hitherto art has failed to complete the work.

I beg to suggest a procedure, which, hereafter, in some unfortunate cases of this class, may deserve a trial.

I propose to close the ulcer by an operation of anaplasty. In short, to imitate one of the processes of nature, by sliding in old skin to repair a waste, where the process of forming new skin has ceased, and been finally given up.

If we seek to obtain this supply from the neighborhood of the ulcer, around which the skin has already reached its utmost tension, we shall only substitute one ulcer for another. We must, therefore, generally look to the opposite limb, or to the limb of some other person, for the material with which the transplantation or engrafting is to be made.

The mode of accomplishing this, will not differ materially from that which has been generally adopted in anaplasty from remote parts, except that the ulcerated surface ought to be excised freely before the new skin is laid upon it.

By this means, I hope, gentlemen, not only to supply an amount of skin equal to the size of the piece transferred, but to furnish, also, a nucleus from which additional skin shall be formed. I hope to establish a new centre of life—an oasis—from whose outer verge a true and healthy vegetation shall advance in every direction over the exhausted soil.

It is not improbable, also, that the graft will itself expand, or be drawn centrifugally by the contraction of the surrounding granulations and cicatrix, conversely, as the skin about the ulcer had before been stretched and drawn centripetally, by a similar action of the granulations and cicatrix situated within its free margin, so that, after a time, it will cover more space, independent of any actual growth, than it did originally. The opposite of this happens usually in anaplasty, and would occur here, did the flap equal or exceed in size the wants of the parts to be supplied. The flap would contract, thicken, and project itself above the surface. But in old ulcers, it will generally be found impossible to

furnish a direct supply of integument equal to the loss. A deficiency must probably still exist, and sufficient, it is believed, to determine in the transplanted skin a necessity of expansion.

The value and practicability of these views are, I trust, in a measure established by the results, in the case which I shall now take the liberty of bringing before you.

You will excuse me, however, if I detain you a moment longer to explain to you that, so long as eight years since, I proposed the same operation, and had anticipated most of the results which I have now actually obtained.

In the report of my surgical clinic, for 1846, at Geneva Medical College, published in the *Buffalo Medical Journal*, vol. ii, p. 508, occurs the following passage :—

"*Indolent ulcer.* M—— of Geneva.—This lad, now about fifteen years old, had the right leg and part of the thigh terribly lacerated, and almost deprived of its integument, by a threshing-machine, eight years ago. The wound has never closed entirely, but an indolent ulcer of great extent exists, surrounded by a broad margin of hard integument, from which sometimes new skin will form, and then it will rapidly crumble away, and the ulceration will extend, perhaps, beyond its original bounds. Thus it has continued to partially close and again open, during all this time ; meanwhile, the health and strength of the lad have remained excellent, but the leg has become bent at the knee, and he walks with a halt. Two years ago Dr. Hamilton took a cast of the ulcer, which is now seen to correspond almost precisely with its present extent.

"Dr. Hamilton and others having tried almost every plan of treatment which would offer a prospect of success, and having so completely failed, as Dr. Hamilton believes, because the indurated margin, near two inches in breadth—all around the sore, is incapable of projecting from itself sound skin, the Dr. has proposed to the boy a plastic operation, with the view of planting upon the centre of the ulcer a piece of new and perfectly healthy skin. He proposes

to take this from the calf of the other leg (having secured the two together), not intending to cover the whole sore, but perhaps two or three square inches, which he believes will be enough to secure the closure of the whole wound in a short time."

Two years before the date of this clinic, when I took the cast alluded to in the above report, I had made the same proposition to the lad, and when he declined submitting to it, I appealed to his father, who was a worthless inebriate, to allow me to secure one of his legs to his son's, that I might make the transplantation from him. In no other way, I assured him, could he so much benefit his family.

I need scarcely say that permission was never obtained, and that I have never found an opportunity of determining the practicability of my suggestions until during the last year, and in the person of the man who is now before you.

The following is the report of the case, copied, in part, from the Hospital Records:

Horace Driscoll, aged 30 years; Irish laborer; had the skin and flesh extensively torn from the right leg by a dirt car, on the 3rd of November, 1852. He has been in the hospital most of the time since then until now. The wound has nearly healed several times, but never entirely; after exercise the whole would give way, and the ulcer again extend itself completely around the leg.

Jan. 21, 1854, I made the following operation:

The patient was laid upon his belly, upon the operating table before the class. A flap of skin measuring seven inches by four was then raised carefully from the calf of the opposite leg, extending in depth through the cutaneous and cellulo-adipose textures, until the fascia was in sight. Its remaining attachment to the body was by a broad and thick base. The hæmorrhage was slight; no vessels were tied. Lint, spread on both surfaces with simple cerate, was laid between the flap and the surface from which it had been detached, other pledgets of lint similarly covered were placed on the outer surface, while over all and around the entire limb was

wrapt a large mass of cotton batting, secured in place by a lightly turned roller.

He was then laid in bed and perfect quietude enjoined.

Jan. 22.—During the night the wound has bled until the patient looks pale from the loss. The bleeding has now ceased.

Feb. 4th.—Two weeks since the flap was raised. The patient has had to be sustained with beer, his appetite having failed very much since the operation. The flap has been dressed in the same manner as at first, nearly every day. It looks healthy. No part of it has sloughed.

To-day the operation was recommenced before the class, by dissecting out the granulations and part of the cicatrix from the diseased leg, and thus forming a deep bed of the size and shape of the flap as it now appeared, both contracted and thickened. The flap was then made raw again on its margins, and its lower surface was shaved off, with the double purpose of removing the granulations, and of diminishing its excessive thickness. When the bleeding had ceased, the left leg was carried across the right, so that the tendo-Achilles and heel of the left leg rested upon the instep and ankle of the right—a thick cotton pad being interposed to prevent painful pressure. The flap was now brought snugly into its new bed, on the right leg, and well secured with interrupted sutures, a moderate compress, and roller. The two limbs were further secured immovably to each other by bands, and protected at various points by well made compresses, and the wounds carefully covered with lint spread with cerate.

Feb. 5th.—The wound has bled again, as after the first operation, although ice was applied diligently from the moment the dressings were completed. Much pressure was regarded as inadmissible. Bleeding ceased when he became faint, about three hours after the operation.

Feb. 18th.—Two weeks since the last operation, and four weeks from the first. Patient has required to be sustained constantly with beer and nourishing diet. His appetite

still remains bad. Bowels have not been moved in two weeks. He has not suffered much pain, only fatigue. To-day the base was separated from the left leg, the flap having united through most of its edges and under surface, to the opposite leg. No bleeding of consequence followed. The parts were thoroughly washed and dressed with ung. basil. and a snug roller applied. Ordered sulph. mag. ℥j.

Feb. 19th.—No movement of bowels. Repeat sulph. mag.

Feb. 20th.—One corner of the extreme end of the flap is beginning to slough.

Feb. 21st.—Bowels have moved. Sloughing of flap continues. Ordered yeast poultice.

Feb. 25th.—Line of demarcation formed, insulating about one inch and a half of the flap, at the corner where the sloughing commenced.

Beyond this the sloughing never extended. The surfaces continued to close, and about one hundred days after the flap was laid down the healing was finally consummated, and now after a lapse of nearly three months, during which he has been acting as a subordinate dresser at the hospital, the ulcer has not re-opened or shown any tendency that way.

The wound made by the removal of skin from the left leg was completely healed over in about the same length of time as the ulcer on the right, and the whole left limb is now as sound and as perfect as before the operation.

Driscoll is, however, at present, by no means a well man. His health has suffered considerably from his long illness, and from his prolonged confinement in bed, which dates from the time of the accident, through most of the period, up to the time of the closing of the wounds since the operation. The cicatrix around the new skin is tender, and especially at one point where several pieces of bone exfoliated soon after the accident, and precisely over which, unfortunately, the sloughing of the flap took place. The ankle is also somewhat stiffened by the contraction of the skin, and of the gastrocnemii and tendo-Achilles, which latter were seriously involved

in the original injury. These, however, are conditions which the operation did not propose to remedy, at least only in a small degree, or they are temporary accidents, and will certainly yield to time and careful use. If they were to continue, however, it will not be denied that, in the permanent sealing up of a sore, which, but for this operation, must probably have remained open during life, he is amply repaid for all that he has suffered at my hands. I venture to predict that, within one year from this time, he will be able to labor nearly or quite as well as before the accident.

On the 12th of March, five weeks after the flap had been transplanted, it had united by adhesion to the adjacent skin, through about one half of its circumference. The other half was surrounded by a border of granulations and of new skin, varying in breadth from one to ten or fifteen lines; but only at a few points was the bridge of new skin complete. It was especially noticed that nearly all, probably nine-tenths, of this new skin had sprung from the margins of the flap, and only the remaining fraction from the adjacent cicatrix; demonstrating that after transplantation and complete separation from the parent limb, its vitality was unimpaired, and that its re-productive power, if I may so speak, was vastly superior to the re-productive power of the old cicatrix.

You may notice to-day also, that since the cicatrization was completed, the cicatrix formed by growth from the flap, has contracted; and, that, in consequence of this contraction, the flap has become expanded, or been stretched outward, and its surface has become flattened and firm, whereas, it was, at first, and for a long time, elevated above the surrounding skin, and flabby.

Summary:—

1st.—Ulcers, accompanied with extensive loss of integument, do generally refuse to heal, whatever may be the health of the body or of the limb.

2d.—Anaplasty will sometimes succeed in accomplishing a permanent cure, and especially where the health of the body and of the limb are perfect, and where, by inference, the re-

fusal to heal is alone attributable to the extent of the tegumentary loss.

3d.—The graft must be brought from a part quite remote; generally from an opposite limb, or from another person.

4th.—If smaller than the chasm which it is intended to fill, the graft will grow, or project from itself new skin to supply the deficiency.

5th.—It is not improbable that the graft will expand during the process of cicatrization at its margins, but especially for a time after the cicatrization is consummated.

6th.—In consequence of one or of both of these two latter circumstances, it will not be necessary to make the graft so large as the deficiency it is intended to supply.

ART. II. *Practical Observations on the Remedial Properties of Simaba Cedron, and on its employment as a Substitute for Quinine.* By SAMUEL S. PURPLE, M.D.

IT will be remembered by those who take especial interest in investigations which relate to vegetable materia medica, that about 1850 the attention of the medical public was particularly called to "cedron," as an invaluable specific for the bites of venomous snakes. In the spring of 1852, Burtis Skidmore, Esq., of this city, placed in my possession, for examination, two of the kernels. This was my first acquaintance with "cedron," for at this time I had not seen Mr. Hooker's description and figure of the tree and cotyledons.* From the limited opportunity which these seeds furnished me of observing their effects in an obstinate case of intermittent fever, I became strongly desirous of testing its virtue on an extensive scale in this disease. Such an opportunity I failed in obtaining until September, 1853, when I received from Dr. J. A. Magrath, of Kingston, Jamaica, a package, containing about a pound of the cotyledons.

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* *London Jour. of Botany*, 1850, and *Pharmaceutical Jour. and Transactions*, vol. x. p. 344.

During the autumn of 1853, cases of intermittent fever were not of unfrequent occurrence in this city, especially in the vicinity of Canal and Hudson streets, and, in fact, in the neighborhood of most of the "*main sewers*" in different sections of the city. It is not our intention to stop here and offer an explanation of the causes which are, and must be, from necessity, continually at work in producing intermittent fever in this city. This would require a searching investigation into our whole system of drainage and supply, and would in no way answer the objects for which this paper is written. As before stated, cases of fever were not of unfrequent occurrence, and during the months of September, October, and November, nine cases were treated with the article under consideration. Of this number, six were recent, and three were of long standing, having successfully resisted quinine, Fowler's solution, and all the usual means resorted to in the treatment of the disease. Of the six recent cases, five yielded readily and permanently to the remedy, in doses and at periods that will be particularized in the following cases; while the remaining one resisted, successively, emetics, cedron, quinine, Fowler's solution, etc., and finally yielded permanently to beberine and nux vomica combined. Of the three cases of long standing, and previously treated by different remedies, unsuccessfully, two yielded permanently to cedron, and one yielded temporarily, returning under the use of the remedy, but finally yielded permanently to cedron, after the administration of an emetic, followed by ten grains of pil. hydra. in divided doses.

CASE 1.—Mrs. E., aged 38 years, of nervous sanguine temperament, rather feeble health, the mother of five children, resided in Newark, N. J., during the summer of 1852, and there contracted intermittent fever, from which she slowly recovered under the use of quinine, having experienced three relapses in the course of the season. In the month of September, 1853, having resided in this city nearly a year, she was again attacked with the quotidian form of the disease, and consulted me in the intermission between the third and

fourth paroxysm. She was ordered, as there was considerable gastric derangement, fifteen grains pil. rhei. comp., to be taken immediately; and after the next paroxysm of fever, to take ten grains of the cedron in powder every two hours. At the period of the next (the fifth) paroxysm, she complained of slight headache, but experienced no chill. From this time she was ordered ten grains of cedron, in powder, three times daily, for ten days. She had no return of the disease, and enjoyed, after, her usual health.

CASE 2.—Mr. B., book-keeper in a bank, aged 27, of spare habit, contracted intermittent fever on Staten Island, in the fall of 1852, which yielded to quinine. Late in the summer of 1853 he was again the subject of the disease, and consulted me some four weeks after the occurrence of the first paroxysm. Relying upon his own judgment, he had already taken quinine, in the same doses as the fall previous, with the effect of temporarily arresting the disease. Its return, after an interval of nine days, led him to resume the use of the quinine in increased doses, until singing of the ears convinced him of the propriety of consulting a physician. At the time of his first visit, finding that there existed much tenderness or pressure over the epigastrium, slight yellowness of the conjunctiva, and tongue coated with brown fur in the centre, with red tip and edges, he was ordered thirty grains of ipecac. in powder, with ten grains of calomel. This portion operated freely as an emeto-cathartic, and after the succeeding paroxysm of ague, he was ordered ten grains of cedron, reduced to powder by grating the seed on a nutmeg grater, every three hours. The paroxysm of ague, which was expected, at its usual period, was delayed some two hours, and was somewhat less in severity and shorter in duration than that which succeeded the action of the emetic. As there existed some pain in the bowels, which was supposed to arise from the action of the cedron, he was ordered the same amount as before, every four hours, combined with fifteen drops tinct. opii. comp. These directions were steadily adhered to for four days, when the paroxysms of ague hav-

ing ceased, he was directed to omit the paregoric, and use the same amount of cedron three times a day. These orders were followed for some two weeks, when the further use of the medicine was suspended. Mr. B. has had no return of the disease. At no time did he complain of singing in the ears, or any other unpleasant sensations, except the slight griping pain in the bowels, which could be attributed to the action of the cedron.

CASE 3.—M. S., aged 29 years, by profession an accountant, of spare habits, and strong nervous temperament, in the summer of 1852, contracted intermittent fever, of the quotidian variety, at Morrisania, where he was then residing. His attending physician put him upon the use of quinine, which, in the course of five days, arrested the paroxysms of ague. Remaining, however, exposed to the same causes, the disease returned in the course of the third week, when he was again put upon its use, with the effect of arresting the disease, although more tardily than on the previous occasion. From this time he remained free from the disease, until January, 1853, when, from domestic causes, his usual health having become considerably impaired, he was attacked with the disease, with much greater severity than on either of the previous occasions. Tonics, combined with quinine, were ordered him by his medical attendant. These were perseveringly used, for a period of four weeks, with but slight beneficial effects, and, meantime, his general health had become still more impaired by the disease. Seeing that something more was required to arrest the paroxysms, he was, very properly, ordered an ipecac. emetic, which was followed by blue pill, in five grain doses, three times daily, until two paroxysms (the fourth day) had passed by, when he was ordered Fowler's solution, accompanied with a liberal diet, and, during the well day, a moderate use of London porter. Under this treatment, there occurred soon a decided improvement in Mr. S.'s case, and, although at the end of two weeks, he had no distinct ague-chill, yet there remained a periodical headache, accompanied with fever, and neuralgic

pains in the facial and inferior maxillary nerves. These, under the use of carbonate of iron and vegetable tonics, almost entirely disappeared, and from this time until the succeeding October, with the exception of an occasional chill, or ague paroxysm, he continued to attend to his usual business.

In the latter part of September, 1853, Mr. S. spent about a week on Staten Island, and, immediately on his return to this city, was seized with the tertian form of intermittent fever, for the cure of which, in the course of four weeks, he took an ipecac. emetic, quinine, Fowler's solution, nux vomica, and pil. hydrar., followed again by quinine, with but slight, or temporary benefit. His general health having now become considerably reduced, he was almost ready to despair of a cure being effected in his case.

On the 2d of November, I was first consulted in regard to the treatment of the case, and, as he had but two days previous taken an emetico-cathartic, and there was but little chylopoietic derangement, he was immediately put upon the use of cedron in powder, and in twenty grain doses, every four hours in the froth of porter, with directions to suspend the remedy only during the hot stages of the disease. For four days he steadily persevered in the use of cedron, and at the end of this period, as there was a marked improvement —the paroxysms of fever having nearly ceased, and as there was present slight diarrhea, accompanied with griping pains in the bowels—the cedron was diminished to ten grain doses, each dose of which was combined with fifteen drops of tinct. opii camph. This treatment was continued for three days, when all evidence of paroxysmal symptoms had disappeared. Mr. S. was now ordered ten grains of cedron every morning, with a view to its tonic effect, for I had become satisfied that it possessed decided tonic properties, especially in those states of the system which call for the use of columba, gentian, and other vegetable tonics. Under this treatment, he gradually and permanently convalesced, and has since had no return of the disease.

CASE 4.—A. N., aged 19 years, of marked bilious temper-

ament, and robust constitution, on the 26th of July, 1853, sickened with what he supposed was a bilious attack, which, under domestic treatment, continued three days, when he was seized with a severe fit of ague, about 11 o'clock, A.M., which was followed with much febrile excitement, intense pain in the head, etc., which, in its turn, was succeeded by profuse sweating. With this paroxysm, all sickness passed off, and the next day he considered himself in usual health. On the second day from the first ague fit, at M. he sickened again, with a paroxysm, the same as two days previous, when, for the first time, he consulted me. Believing his attack to be intermittent fever, he was ordered to take of cedron in powder, as much as could be held upon a Spanish shilling piece, every four hours, for forty-eight hours, omitting it only during the succeeding paroxysm, if it should occur. He took as directed, in all, ten doses, with the effect of permanently arresting the disease. He has since had no return of intermittent fever.

CASE 5.—A little girl, aged about six years, daughter of Mr. H., of 29th street, was observed to complain, every other forenoon, of being chilly, which condition was followed by headache and fever. She was subjected to domestic treatment for a week or more, when the paroxysms of ague became well marked, and the fever was accompanied by delirium. When first seen by me, the centre of her tongue was coated with a brownish-yellow, the tip being red; she complained of lassitude, and considerable pain in the epigastric region. She was ordered ten grains of pulv. rhei, with three grains of calomel, which produced three evacuations of the bowels. She was then directed to take a teaspoonful of the following mixture every four hours: pulv. cedron, thirty grains; simple syrup, two ounces; paregoric, one drachm. These directions were carried out for thirty-six hours, and as the next paroxysm did not recur, she was ordered a teaspoonful morning and evening. Her recovery was complete, and although apparently exposed to the same causes, she has since had no return of the disease.

REMARKS.—In addition to the foregoing cases, reported, and alluded to as treated in the fall of 1853, I have treated six cases during the past summer, (1854) exclusively with cedron, with the following results: Four with cure, prompt and permanent, one passed from my observation before the result was known, and the remaining one is still under observation, having resisted emetics, quinine, and beberine, previous to consulting me.

From these results and those obtained in neuralgic cases, which we think unnessary to detail, there can hardly arise a doubt but that the cotyledons of the Simaba cedron, one of which is here represented, possess decided anti-periodic prop-

Convex surface of a Cotyledon of Cedron.

Flat surface of a Cotyledon of Cedron.

erties. And in this belief we do not stand alone. Dr. Cespèdes, of Bogota; M. Herran, of France; Dr. P. Smith, of San Francisco, Cal.; and Dr. Magrath, of Jamaica, W. I.; have each testified, as will be seen hereafter, to its decided medicinal virtues in this respect.

Dr. Magrath, of Kingston, Jamaica, has used it extensively not only in the treatment of intermittent fever, but also in yellow fever. In this latter disease, he writes me, that it appears as useless as quinine, or any other remedy to assist the progress of the disease, in most of the cases in hospital, although it was thought that the skin of those who were taking it, was less dark or congested, than those who did not take it. His mode of giving it in intermittent fever, was in powder, or in pills, in ten grain doses every three hours, for twenty-four or thirty-six hours, and with the effect of successfully arresting the disease; he always gave it during the

intermission, and it almost always prevented a second paroxysm if it failed in the first.

Thus it will be seen that the evidence which has already accumulated in regard to this plant, points to the fact that it possesses important anti-periodic properties. And perhaps upon further investigation, it may be found to be a valuable substitute for quinine—a desideratum long sought after. Our own observations have been confined to the cotyledons in powder in intermittent, and in tincture in neuralgia, dyspepsia, and chronic derangements of the stomach, involving impaired digestion. In these conditions we are satisfied that it possesses curative properties equal to columba, quassia, or any of the vegetable tonics, and in view of these properties, we feel assured that it is worthy of an exalted position among this classification of the vegetable Materia Medica.

To M. Planchon, according to Hooker, belongs the merit of giving a name and botanical station to the cedron plant. In his truly excellent *Revue de la Famille des Simaroubées** he first described this plant from Mr. Purdie's specimens in Mr. Hooker's Herbarium. For the following description and figure, we are indebted to the *London Journal of Botany*, as before cited.

Simaba *cedron*, *Planch.*; trunco erecto ramis subumbellato-capitatis, foliis longissimis pinnatis glabris sub-20-jugis cum impari, foliolis sūbcoriaceis eliptico-lanceolatis acuminulatis basi obliquis, racemis elongatis compositis ramis rufescenti-subvelutinis, drupis magnis ovalibus solitariis. —S. Cedron, *Planchon in Hooker's Lond. Jour. Bot.* vol. vi. p. 566.

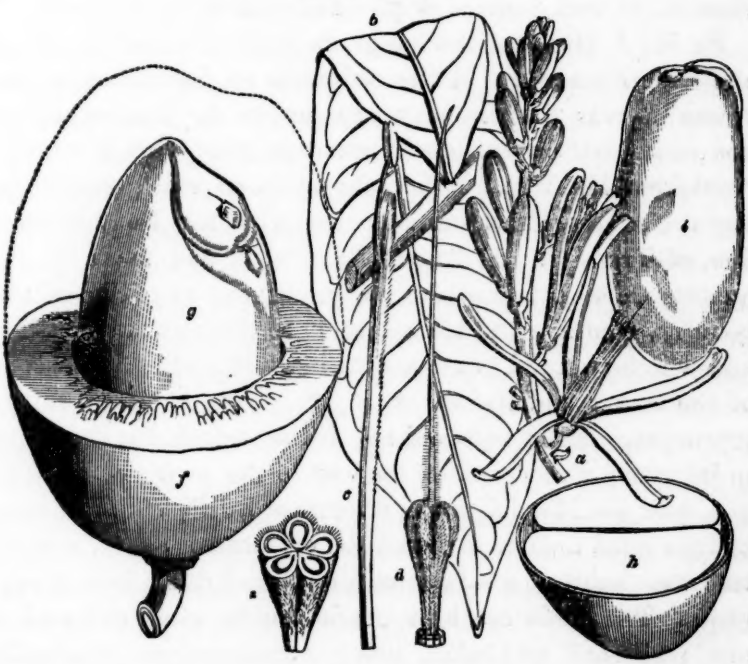
HAB.—New Grenada. Banks (near San Pablo) of the Magdalena, *W. Purdie*, Isle de Caybo, coast of the Pacific, *Thomas Seemann.*

DESCR.—The height of the *tree* is not exactly stated, but it does not probably exceed twenty feet, with an erect undivided *trunk* not more than six inches in diameter, crowned with a dense and somewhat umbellate head of *branches*. *Leaves* glabrous, two feet and more long, pinnated with twenty or more alternate, rarely opposite sub-coriaceous, sessile *leaflets* 4–6 inches long, accuminulate, oblique (or inæquilateral) at the base, penninerved; the *rachis* is terete, terminated by an odd leaflet. *Racemes* two feet or more in length, strict, branched, the main *rachis* and *branches*

* *London Journal of Botany.* Vol. v. p. 566.

clothed with minute ferruginous, velvety down, chiefly towards the apices; *branches* short, solitary or clustered; *pedicels* bracteolated. *Calyx* minute, cup-shaped, obscurely 5-toothed feruginous-downy. *Corolla* of five, linear, obtuse or retuse, spreading *petals*, pale brown and downy externally. *Stamens* ten, short, arising from the back of as many staminiferous *scales*, which are erect, and approximate in a tube. *Anthers* oblong, introrse. *Ovaries* five, seated upon a columnar *gynophore*, downy. *Styles* five, united into one, above the base, and exceeding the stamens in length. *Ovules*, one in each ovary. *Fruit*, very large, solitary (by abortion); *drupe* of an oval form, oblique at the top, and having a scar below the summit, indicating the former site of the style. The soft portion of the fruit seems, in the preserved state, not to have been very soft and fleshy, it is lined with a horny *endocarp*. *Seed* large, solitary, suspended, its integument membranaceous, with a conspicuous *chalaza*. *Albumen*, none. *Embryo*, conform with the sides. *Cotyledons* very large, fleshy, white when fresh.

Simaba Cedron.



a, branch of a raceme; *b*, a leaf; *c*, scale, bearing a stamen; *d*, ovaries, with the gynophore; *e*, transverse section through the five ovaries, *magnified*; *f*, fruit cut round transversely, so as to exhibit the transverse seed; *g*, the dotted line shows the outline of the entire fruit; *h*, transverse section of the seed; *i*, a cotyledon, in the state which it is exported:—*nat. size*.

In regard to the history of its introduction into practice, we have nothing certain. M. Herran,* Chargé d'Affaires de la République de Costa Rica, in France, says that "it was only in 1828, that the native Indians brought to the market of Carthagena, some seeds of *cédron*. To prove their infallible virtue, they submitted animals and themselves to be bitten by the most dangerous serpents, called *Toboba Corlia de la Montagne*, etc., and the promptitude with which the poison was neutralized, was so marvelous that a single seed sold for a doubloon, (eighty-three francs)." * * * * * * * * * "During my long sojourn in Central America, I had recourse to the seeds of cedron, successfully, in eight different cases." * * * * * * * * * * * * * * * "I have also successfully employed this medicine in intermittent fevers, which had resisted sulphate of quinine."

Sir W. J. Hooker, who has given by far the most complete and scientific account of the cedron to be found,† says "By whom it was first brought into notice in Europe, I am not aware, but my earliest information respecting it was derived from Mr. Wm. Purdie, late botanical collector for the Royal Gardens, Kew, and now curator of the Botanic Garden, of Trinidad. At Bagota, Mr. Purdie had made the acquaintance of Dr. Cespèdes, an intelligent physician of the country, who directed his attention to the plant in question, and who forwarded to me a drawing with very fair analysis of the flower and fruit." * * * * * * In his future journeyings, Mr. Purdie did not fail to search for the plant in its native woods, and on his way to the province of Antigua, near the Magdalena, he wrote word, July 1846: 'I have had the good fortune to detect the celebrated *cedron*, a small tree with habit of the Jamaica Mountain-Pride, (*Mela Azedarach*). The seeds are here much sought after, and sold at one real each cotyledon, being considered an invaluable

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* *Comptes Rendus.* Vol. xxxi. p. 141-2.

† Vide *Description and figure of the Cedron of the Magdalena River*, (*Simaba cedron*, Planchon). By Sir W. J. Hooker, D.C.L., F.R.S.—*London Jour. of Botany*, 1850.

specific for the bites of snakes, for intermittents and stomach complaints generally. The bark and wood also abound in a high degree with the bitter principle.' The dried specimens sent by Mr. Purdie were further accompanied with the following note: 'The *cedron* has an erect stem not more than six inches in diameter, crowned by an umbelate mass of branches, with large handsome pinated foliage; so highly are the seeds prized here for their powerful medicinal virtues, that they cannot be purchased for less than two reals, or one shilling each. I have had the testimony of medical men in Bagota in favor of their properties, and Dr. Cheyne has frequently tried them with success. Dr. Cespèdes, some years ago, was sent expressly on a mission from Bagota to the locality of this plant, which is in woods immediately behind the village of San Pablo, on the banks of the Rio Grand de Magdalena.' The cedron is, however, probably more extensively distributed than Dr. Cespèdes and Mr. Purdie imagine, especially to the westward towards the Pacific, in New Grenada. Another collector of Kew Gardens, then and still on board of H. M. surveying ship "Herald," (Capt. Kellett, commander), transmitted specimens to Kew the following year, 1847, from the Isle de Caybo."

Dr. Peter Smith, of the City Hospital, of San Francisco, received a letter dated Nov. 22d, 1849, from Don José Abaldia, Govenor of Panama,* in which it is stated that, "the tree which produces the fruit, and is called the '*cedron*,' is described in the scientific work of Dr. Cespèdes, one of their own naturalists. * * * * The tree grows abundantly in humid places, and as the wood is inapplicable to the uses of life, and the fruit neglected by animals on account of its bitterness, an abundant supply is predicted."

I might here state that the first specimens I saw, those presented me by Mr. Skidmore, were obtained at Panama.

Dr. Horner, of the U. S. N., states† "that Dr. Smith, of San Francisco, used for the cure of chronic dysentery and inter-

* *Philadelphia Medical Examiner.* Vol. vii. N. S. p. 140. † *Ibid*, p. 91.

mittent fever, the kernels of the cedron, a fruit obtained at Panama. * * * * He gave them scraped in the dose of ten or more grains, and thought them equally as efficacious as quinine. The cedron has great celebrity among the people of the Isthmus, for the cure of snake bites, and he states that they carry it about their persons to have it in readiness for immediate use when needed. Dr. Smith gave me a number of kernels, and one entire pod, which I brought home for distribution. While crossing the Isthmus, I would have been much pleased to find the tree which yields this valuable medicine, but I was unable to obtain any accurate description of it, or of the places where it grows."

Dr. Pereira, in the last edition of his great work, on *Materia Medica*, makes no mention of this plant. On the 2d of Nov., 1850, however, he wrote Sir J. W. Hooker, regarding it in the following words,* "I am not acquainted with any observations made in England, or even in Europe, respecting the *Simaba cedron.* * * * * The specimen of the seeds and fruit, which I possess, were brought a few months ago from Panama, by a gentleman (not a medical man). They were given him by W. Barrington, Esq., an English surgeon at Panama. The statement accompanying them was to the effect that the seeds were much used, and with great confidence by the native doctors of the Panama country, both locally and internally, as the grand antidote against snake poison.

"To the taste these seeds are intensely bitter, and doubtless like the bitter barks and woods of other Simarubaceous plants *(e. gr. Quassia* and *Simaruba*) they possess the properties of other bitter tonics, and might be useful in dyspepsia, and perhaps ague."

From all that we can learn regarding its habitude and mode of procurement, we are led to believe that the only obstacle in the way of the use of cedron in medicine, is its apparently somewhat limited supply. We say apparent, for in a letter received from Dr. Magrath, we learn that "the

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* *London Jour. of Botany, opit. cit.*

cedron appears to be obtainable in quantity, with some little difficulty, from Carthagena; but a brisk demand, no doubt, would cause an equal supply." The history of all new medicinal agents, derived from savage or semi-civilized countries, teaches us the fact, that at first, the remedy sought after is obtained with much difficulty; but we should not, from this cause alone, neglect to investigate or enquire into its uses; and should it, according to our belief, be found that this article possesses decided merit, and some advantages over quinine, we have no doubt but that some of our enterprising commercial druggists will find it to their interest to devise means for its introduction into our market.

Finally:—From the declared experience of various observers of the medicinal effects of the Simaba cedron, we are warranted in drawing the following conclusions regarding its therapeutic action:—

That it possesses decided anti-periodic properties, and is therefore applicable in the treatment of periodic diseases.

That it is less likely than quinine to produce the aggregate of encephalic or neuropathic phenomena, induced by overdoses.

That it may, in large doses, repeated often, produce griping of the bowels, and even diarrhœa; but that these conditions are easily controlled by appropriate medicaments.

That, as a remedy in intermittent fever, it possesses properties, in many respects, equal to quinine, and in most cases is equally adapted to the curation of this disease.

That, in the treatment of yellow fever, it does not appear to possess any particular advantages over quinine, but nevertheless is equally well adapted to fulfill the indications which call for the use of this latter remedy.

That it possesses marked tonic properties, and deserves a prominent place in this classification of the Materia Medica.

That in chronic dysentery, diarrhœa, dyspepsia, and all states of the stomach, accompanied with impaired or difficult digestion, its use will be found to be attended with benefit.

That, should a demand arise for its use in medicine, it is

believed that it will be found not difficult to obtain a supply, in quantities sufficient to afford it at a much less price than quinine.

ART. III. *Amputations of the Lower Extremities, at Bellevue Hospital.* By JOHN O. STONE, M.D., one of the Surgeons of Bellevue Hospital.

MESSRS. EDITORS:—The following cases of amputation were performed, at Bellevue Hospital, during the last three years. Some of them are interesting, and have a value in themselves; but, independently of this consideration, I wish to publish them, as a small contribution to statistical knowledge, and aid in solving the question, how far amputation is to be recommended as a means of cure?

A few years ago, I published in your Journal some statistics on amputations, and to them these cases from Bellevue Hospital can appropriately be added.

Very truly yours,

JOHN O. STONE,
30 Waverly Place.

To Drs. Purple and Smith.
July 20th, 1854.

I.—AMPUTATION OF THIGH.

CASE 1.—*Amputation of Thigh. General Ostitis, etc.*—A female, aged 26 years, has suffered from a diseased knee for more than a year. It was enlarged, as in scrofulous disease. The condyles apparently increased in size, and opposite to the joint there was a soft swelling, as if pus was enclosed in the joint. Since the commencement of the disease, the knee has been very painful, and now her sufferings are excruciating. The femur was felt to be enlarged to a considerable extent above the knee. She had lost much flesh, and had a general cachectic look.

In consultation, it was decided that the thigh should be amputated, which was done on November 22d, 1851.

On sawing the bone, it was observed that the saw traversed the bone with remarkable ease. The bone was found enlarged and softened, and it was thought best, for the purpose of going above the diseased part, to saw the bone again higher up. This was consequently done, an inch higher up, but not with the effect desired. The bone was still found enlarged and softened. There was great vascularity, and, although six hours were allowed to elapse before the stump was dressed, there was much oozing of blood. Fourteen ligatures were used. The bone itself was vascular.

The tibia and femur were found much enlarged, and the periosteum thickened. There was no pus in the joint, but great thickening of the synovial membrane. The cartilage covering the heads of the bones was removed in several places. The condyles of the femur increased in size, and covered on their sides with a deposit of new bone. On sawing open the tibia and femur, their interior was found red and vascular, the outer crust thin, and the reticular tissue enlarged, softened, and containing oily fluid. There was also, in the interior of both bones, a deposit of cartilaginous looking material, which was thought to be cancer; but, on examination under the microscope, no cancer cells were found. There was, what seemed to be, a sequestrum in the lower part of the femur, which extended quite into the condyles. The disease, I suppose, must be regarded as an inflammation of the bones.

For more than a week after the operation, the intense pain in the bone continued, reaching as high as the pelvis. Much pain was also felt in the back and abdomen. These pains served to prolong the suspicion that there might be malignant disease. Large doses of morphine were required to alleviate her sufferings, and she was put upon the use of he iodide of potash, three times a day.

Three weeks after the operation, the pains ceased. The stump had nearly healed; most of it by the first intention. The ligature of the femoral had not yet separated.

She continued doing well, and shortly after was discharged cured.

CASE 2.—*Amputation of Thigh. Leg crushed by a heavy piece of timber.*—A consultation was held upon ——, a laboring man, whose leg had been broken by the falling of a heavy piece of timber upon it. The patient had been addicted to the free use of ardent spirits. There was a wound in front and another behind, through which the gastrocnemius protruded, for an inch or more, in a lacerated condition. He lost much blood, and it was supposed to come from the posterior tibial artery. The bone was very much broken. A large coagulum filled both wounds, and sponge had to be inserted to restrain the hemorrhage. The surgeon on duty, who was the first to see him, cut off the protruded and lacerated muscle.

A consultation was held thirty-six hours after the accident. His condition was feeble. There was sighing, with a sunken countenance. The foot of the injured limb was cold; the bone much shattered, and the fracture supposed to extend into the knee joint. Ice had been applied to the limb; there was no reaction about the wound. He had lost a great quantity of blood. Pulse feeble, and 120 in a minute. It was the unanimous opinion of the three surgeons, who were present, that no operation should be performed, but that opiates with brandy should be given, with as much nourishment as he could take.

On the next day, the six surgeons of the hospital met in consultation. The majority decided in favor of amputation of the thigh—two of them were of the contrary opinion. No heat had returned to the foot, and very little warmth even about the wound. His pulse was 120 and upwards. All thought that the condition of the patient was unfavorable, and that death might follow the operation, and, if he continued to live, that the operation would have to be performed.

The question was, whether then, or at some future time, amputation should be resorted to. The majority regarded the present as giving the best chance for recovery; that the limb was severely injured, and of itself was a cause of irri-

tation; that the general constitution was depressed by it, and therefore it ought to be removed at once.

The minority thought that the symptoms of reaction were very slight, as indicated by increased warmth about the wound, and, therefore there was no cause for immediate interference; that sixty hours had elapsed since the injury, and he had not died of the shock, and probably would not; that the danger of sinking after the operation, if done at once, was very great, and would be lessened by a longer delay.

The amputation was performed on December 4th, 1852, in the circular method. Ether was administered. He fainted after the operation, but soon rallied.

On December 7th, his pulse was very quick, but he was cheerful. Did not see the stump, but was given to understand that it was sloughing.

He gradually sunk and died.

CASE 3.—*Amputation of Thigh. Caries of Patella. Synovitis*, etc. February 19th, 1853.—A consultation was held to-day, on a man who had a disease of the knee joint. An abcess had extended up the thigh, and had been opened, but it still continued to discharge. Before this opening was made he had suffered much, but since then had improved in health. Near to the patella were two fistulous openings, through which a probe could touch the patella, which was bare and carious. The probe could also pass under the patella, and consequently into the cavity of the joint. The patient was feeble, but not in a discouraging condition.

It was advised, in this case, that the patella should be removed, for this was the chief disease, and by its removal no additional evil would be done, for the joint was already opened; if this were done, a free opening would be made into the joint, so that the pus could escape readily, and not be pent up, to excite constitutional irritation: if no good followed this practice, amputation was still a remaining resource; that amputation of the thigh, of itself, was very fatal, and ought not to be too hastily ventured upon; exten-

sive experience had shown that suppurating joints were abcesses, and ought to be treated as abcesses, in any other part of the body; that the free opening of them was generally followed by relief, and offered the best chance of saving life as well as limb.

The opposite opinion to this prevailed, and the limb was amputated. On examining the joint, after removal of the limb, it was proved that the patella alone was carious.

The patient died five days after the operation.

CASE 4.—*Amputation of Thigh. Chronic Disease of the Knee.*—Owen ——, aged 22, had been a long while affected with scrofulous disease of the knee. Some weeks before the limb was removed, he had a soft fluctuating swelling on the side of the knee, which was supposed to be an abscess of the joint; but, on being punctured with a grooved needle, no pus escaped, no evil consequences followed the puncture. His sufferings from pain before and after this were intense, and led us to urge upon him the necessity of amputation. Weeks elapsed before he could conclude to have it done. Pain, fever, and sweats had wasted his strength, and nearly destroyed all his resolution. In October, 1853, he consented to the operation, and, after a consultation, the thigh was amputated.

On examination of the affected knee, the synovial membrane was found thickened and pulpy, and in its midst an abscess was discovered. The abscess seemed to have its origin from an ulcerated condyle of the femur.

This man's lungs, before the operation, manifested dullness on percussion, and he was supposed to be tubercular.

In February, 1854, he had perfectly recovered, and grown fat.

CASE 5.—*Amputation of Thigh. Chronic Synovitis. Partial anchylosis, etc.*—Rosa ——, aged 27, was admitted into the Hospital, Oct. 18th, 1852, for synovitis. Ulceration took place in the integuments, and bare bone could be touched with the probe. Her general health failed, and the leg was bent at a right angle with the thigh. On October 5th, 1853,

the thigh was amputated. Partial anchylosis was found. She recovered.

Case 6.—*Amputation of Thigh. Gangrene of Leg. Closure of Iliac Artery.*— ——, a seamstress, aged 17, had lived for months chiefly on bread and tea. She had been ill, before her admission, with what he considered fever, yet she had abundant flesh, and did not resemble a patient who had suffered from fever. May it not have been acute arteritis?

She was admitted in October, 1853, with an acute gangrene of the foot, which continued to extend until it approached the knee. Her sufferings were very great. No pulsation could be felt along the course of the femoral artery.

The leg was constantly enveloped in flannels, wrung out in hot water.

On Nov. 12th, 1853, the line of demarcation having for several days been fairly formed, the thigh was amputated. Sulphuric ether was given to full insensibility. Only one small artery required to be tied, and this did not seem to be the femoral.

This woman had sloughing at the stump, and of the integuments at the groin, and died.

The iliac artery was found closed with a plug of coagulum.

Case 7.—*Amputation of Thigh. Chronic disease.*— ——, a female, had been an inmate of the Hospital for many months, for a caries of the head of the tibia near to the articulation. The joint admitted of flexion and extension, and when the first consultation was called, it was not thought to be implicated. Several fistulæ led down to the bare bone.

It was recommended to introduce sponge tents into the fistulæ, so as to make pressure on the ulcerated bone. This was done, and in a short time a piece of bone, about the size of the last joint of the little finger, became detached, and was removed. More diseased bone was then felt. Her health became undermined, and, at a subsequent consultation, it was judged best to amputate the thigh. The limb was removed on the 4th of Feb., 1854.

The knee-joint was found to be only partially affected; there were fibrous adhesions between the patella and condyles of the femur, tibia was very little affected, and a cavity was found in its head, from which the piece of bone had been removed. There was no bare bone in the articular surfaces, and organized material covered the spot from which the piece of bone had separated. There was no pus in the joint.

If this woman's general health had continued good, there is reason to believe that she would have recovered with a stiff joint. She did well after the operation, and perfectly recovered.

CASE 8.—*Amputation of Thigh. Accident.*—On February 1st, 1854, a young boy, aged 8 years, was admitted into Bellevue Hospital, with both thighs broken by the swinging of a heavy piece of timber against them. In addition to the fractured thigh, the right knee-joint was opened by being ground by the timber. This limb was broken at its middle. The accident happened at 12 M., and the thigh was amputated above the fracture at 9 P.M. He had suffered much from shock, but had fully rallied. Chloroform was administered. The periosteum was found to be stripped from the broken thigh for several inches above the fracture, so that it became necessary to amputate at the upper third. He died.

CASE 9.—*Amputation of Thigh. Fungus Hæmatodes.*—George ——, aged 37, had always been in good health, until three years since, when he met with a railroad accident. Two of his ribs and right arm were broken, and he suffered from concussion of the brain. Two years of health followed, when he had syphilis. Some of his family have had phthisis, but none to his knowledge have had cancer. He is of very intemperate habits.

About four months ago, while drilling a hole in a rock, he was seized with a sharp pain just below the left knee. On examining the part, he discovered a swelling, about the size of a walnut, over the tuberosity of the tibia. This tumor was very tender to the touch, and occasionally, when not

touched, he had lancinating pains in it, especially at night. It has rapidly enlarged, and became more tender until it assumed its present appearance. He is of good muscular development, face florid, no marked cachectic expression of countenance. Pulse 95, and full. Respiration rapid, 35 in a minute. Complains of a slight cough, which he has had for three weeks.

On the upper and anterior part of the leg, there is a tumor about the size of the two fists, nodulated, and of a dark venous color, near its centre there was a dark-looking fungus projection of small size, which bled on being roughly touched. The tumor was fluctuating, and when a grooved needle was introduced, it discharged a bloody serum. A probe could be thurst down to the bone, and the sensation conveyed to the hand was that which might be occasioned by the breaking of reticulated tissue, offering but slight resistance.

He was advised to have the thigh amputated at once, after waiting five days he consented to have it done. During this interval, the tumor was very painful, and he obtained very little sleep, even with the aid of large doses of opium. It grew very rapidly, and increased its lateral diameter so as almost to encircle the limb.

On May 25th the operation was performed. *Dissection of the tumor*: an incision was made through it and the tibia sawn longitudinally. The mass consisted mostly of coagulated blood. The cancerous growth was soft and irregular, and coagulated blood filled its divisions or interstices. Some parts of it approached to the condition of scirrhus. It was attached to the periosteum in front of the tibia, the bone did not seem to be implicated, nor were there any marks of disease in its interior. A large cancerous mass was also found on the posterior surface of the tibia, and united with the periosteum.

He was very much reduced for weeks after the operation, but now, July 15th, he is doing well. The cough has gone. The stump has healed, with the exception of a place, where the bone is exfoliating. He has gained flesh and color.

CASE 10.—*Amputation of Thigh. Caries of Patella. Suppuration of the Joint.*—Bridget ——, had been for months a patient at Bellevue Hospital. On admission, she had an ulcer over the patella, which finally exposed the patella. She was kept quietly in bed, the limb in splints, because it was anticipated that the joint might subsequently become involved. About six weeks before the amputation, synovial fluid could be pressed from under the integuments, and this was mixed with pus.

The skin which was undermined, was freely divided in order to give it a chance to heal. After this division, the joint itself was found distended with fluid. In a few days, a minute opening was discovered through which synovial fluid escaped. During this time, there was no constitutional suffering, and in order to avoid exciting inflammation the opening was not probed; but chills, fever, and local heat and redness were waited for, to indicate that the joint was suppurating.

In the latter part of May, pus and synovial fluid flowed out, and the joint became very tender and painful, and the pulse arose to 120. The opening was then probed for the first time. The probe passed directly into the joint. This opening was enlarged, so as to admit the passage of the finger into the joint. Pus, synovial fluid, and coagulated fibrine escaped. The under surface of the patella was bare, and so also were the condyles of the femur. The acute symptoms immediately subsided. On June 5th, the left side of the knee became red and fluctuating, and was opened with a knife, pus flowed out freely. There seemed to be now a prospect that she would do well. But she failed in strength, diarrhœa came on, and she began to suffer from bed sores, and in a consultation, it was decided that the limb should be amputated. This was done on the 21st of June.

On examining the joint, the bones which had previously been felt to be bare, were found covered with a velvety layer (granulations), with the exception of a small spot on the tibia, where the bone was still exposed. In fact the joint

was healing, and if the patient's health had warranted longer delay, I feel confident that she would have recovered with an anchylosed limb.

I would now call attention to the similarity which exists between this case and case 3. In both, there was an ulcer over the patella, the patella in both became carious, and then acute synovitis followed with suppuration of joint. From these cases then we may conclude, that a carious patella must be regarded as a grave matter, for it may lead to suppuration of the joint, and endanger limb and life.

II.—AMPUTATION OF LEG.

CASE 1.—*Amputation of Leg. Ostitis. Chopart's Operation and Amputation of Leg.*—Barnay ———, was admitted June 4th, 1850, with disease of the tarsal bones of the left foot, of twelve months' duration. About a year ago, after bathing in the river, where he remained longer than usual, he was seized with a severe chill, which was followed by pain and swelling of the foot. Blisters and poultices were applied, but did not afford any relief.

On admission, the foot was swollen to double its natural size, and there were three fistulæ, one of which communicated with the bone, on the inferior aspect of the foot. The use of the probe caused excessive pain, and could with ease be thrust into the substance of the bone. On pressing together the tarsal and meta-tarsal bones, great pain was caused. There was no pain in moving the ankle joint, or on pressing the os calcis and astragalus together.

No hopes were entertained of effecting a cure, and on the 13th of August, 1850, the operation of amputation through the middle of the tarsus, (Chopart's operation) was performed, in hopes of saving the heel. But after this operation, the astragalus and os calcis were found diseased, i. e. they were soft and compressible between the thumb and fingers. So soft were they, it was discovered that the knife had actually shaved off a portion of the os calcis, without meeting with resistance. Under these circumstances, it was judged wisest

to amputate the leg at once, before he had revived from the effects of the chloroform.

The bones of the leg when divided with the saw, were found to be affected with the same disease. There was a rarefaction of the whole structure, and an attenuation of the outer crust. The cells enlarged, and filled with oil. The tarsal bones were enlarged, very oily and soft.

The wound united mostly by the first intention, and on September 15th, the patient was going about the ward. He perfectly recovered.

This case reminds one of the 1st case of amputation of the thigh mentioned above, and designated as acute ostitis. The thinning of their outer walls, the enlargement of the interior cells, their softness, the contained oil, and the severe accompanying pain, stamp them as identical diseases.

Case 2.—*Amputation of Leg. Injury from blasting rocks.*—
——, aged 32, was admitted for an injury to the left foot, from blasting. The accident took place at noon. He then complained greatly of pain, and fifteen drops of Majendie's solution of morphine were administered.

The toes had been completely carried away by the explosion, the tarsa meta-tarsal joint of the great toe opened, the meta-tarsal bone of the second toe fractured, the skin entirely removed from the sole and upper surface of the foot, with the exception of a tongue of skin three or four inches wide, which extended over the outer malleolus and united the skin of the sole with that of the leg; the tendons lacerated, and the os calcis injured, by the detachment of several spiculæ of bone from it.

It was proposed at first to perform Chopart's operation, and thus give the foot a chance of recovery; but the flap was torn and thin, and on replacing it, was found insufficient to cover the ends of the bones. It was therefore thought to be best to amputate the leg.

Reaction had fully taken place, and the operation was performed at 8 o'clock P.M. Chloroform was administered by one of the physicians of the Hospital, whose experience in the use of this agent, is as great as any one's in the city.

There was nothing during the operation, which was worthy of note. The hæmorrhage was completely controlled by the tourniquet, and the only blood lost, was that which was retained in the limb below the tourniquet. There was no delay in any part of the operation. But during the application of the last strap, in dressing the stump, when the use of the chloroform had been suspended, and the gentleman who administered it had left, the patient was found pulseless and breathless. The windows were at once opened, artificial respiration resorted to, and some brandy which was at hand thrown up the rectum, and immediately after this an ounce of oil of turpentine.

He gasped, breathed, and the pulse returned to the wrist. But it was very feeble, and soon sunk again. The chest and abdomen were covered with mustard cataplasms. Punching under the left hypochondrium seemed to have more effect than any thing else in arousing him, for he would rally, start up in anger and remonstrate. After a time, he complained of the mustard, and asked for its removal. There was great disposition to sleep, and we had him removed to his bed.

He soon began to sink again, took brandy and carbonate of ammonia, and injections of turpentine and capsicum. The extremities were rubbed with camphorated oil, and hartshorn applied to the pit of the stomach. All were unavailing. He died at 2½ o'clock A.M., six hours after the operation.

The shock from the operation, perhaps, was somewhat instrumental in causing this man's death. But I cannot but believe that the chloroform acted injuriously, and that he might have lived if the chloroform had not been administered. Such is the impression left upon my own mind. The advocates for the use of anæsthetics would hardly be willing to make this admission. The French surgeons, some years since, first started the question of the utility of ether in primary operations, and several in this city have entertained the opinion, that after accidents it had a depressing influ-

ence, and consequently increased the chances of a fatal result. This opinion against these agents, in primary amputations is gaining ground, I believe, and especially against chloroform.

As to the assertion, that anæsthetics have the power of preventing shock, it may be said that it is doubtful. In this case, at least, it did not have this effect.

CASE 3.—*Amputation of Leg. Railroad Accident.*—Nov. 1st, 1853. Timothy ——, 22 years of age, was, while intoxicated, the night before, run over by the Harlem railroad cars. He remained on the track, undiscovered, for the space of three hours, and lost much blood before his admission to the hospital.

The anterior tibial artery was wounded, the muscles much torn, the bones extensively broken, and a number of fragments, of several inches in length, removed. No hopes were entertained of saving a limb so much injured as this; but the condition of the patient forbade its immediate removal. He was pale, cold, with an extremely feeble pulse, and irritable stomach.

Warmth and stimuli were administered, and at five o'clock P.M., reaction having returned, the leg was amputated. No chloroform or ether was used. He survived the operation about 24 hours.

CASE 4.—*Amputation of Leg. Railroad Accident.*—A young lad, nine years of age, had his leg crushed between a cart and a railroad car. It was amputated in March, 1854. Sloughing of the stump and protrusion of the bone followed. The dead portion was removed with the forceps. After a protracted period of three months, he recovered.

CASE 5.—*Amputation of Leg. Railroad Accident.*—Francisco ——, a Portuguese, from Madeira, a laborer, aged 54, of temperate habits, was admitted, April 21st, 1854, with a compound and comminuted fracture of the left leg. The accident was caused by jumping from the cars, when in motion, and the passing of the wheels over his leg.

Three hours after the injury, he was brought to the Hos-

pital. He was much prostrated; the surface of the body cold, and the pulse easily compressed. The tibia of the left leg was broken into a multitude of small fragments, two of which had perforated the integuments. The fibula was also broken into a number of pieces, and the muscles and skin, in several places, lacerated. Over the inner head of the gastrocnemii, and just below the knee joint, the skin was torn for three or four inches, and the wounded muscle protruded through the aperture. Notwithstanding the amount of injury, the anterior and posterior tibial arteries could be felt pulsating, and sensation continued in the foot.

At five o'clock, P.M., it was decided that the limb should be amputated; but reaction not being fully established, the operation was deferred until 10 o'clock of the following morning. In the meantime, carbonate of ammonia and brandy were administered.

On the 22d of April, at the appointed hour, amputation was performed, just below the tubercle of the tibia. The single-flap operation was chosen, the flap being taken from the anterior surface of the leg, on account of the lacerated wound behind. The fibula was found broken above the place where the bone had been sawn, and, being loosened from its socket, was taken away entirely. Ether was used in this case.

He bore the operation well, his pulse neither failing in force or frequency. Throughout this and the following day, the surface of the body remained cool, pulse natural, and mind composed.

April 25th.—Had little sleep during the night; surface of the body cool; pulse 130; tongue dry and red; despairs of recovery, but is contented. The stump is painful, hot, and swollen, and shows signs of sloughing. The superficial veins leading from the stump are very prominent. We interpret this symptom to signify inflammation and obstruction of the femoral vein. Beef tea, quinine, and brandy, with morphine at night, were used.

From this time he gradually failed, and on May 3d died.

The femoral vein was much dilated, and contained within it a clot of fibrine. A large abscess was found between the vastus internus and os femoris. There was also a small quantity of pus in the joint.

SUMMARY OF AMPUTATIONS OF THE THIGH.

1.	Secondary	Ostitis, with necrosis	Recovered.
2.	Primary	Leg crushed by heavy timber	Died.
3.	Secondary	Chronic disease, caries of patella	Died.
4.	Secondary	Chronic disease of knee	Recovered.
5.	Secondary	" " "	Recovered.
6.	Secondary	Gangrene of leg; clot in iliac artery	Died.
7.	Secondary	Chronic disease of knee	Recovered.
8.	Primary	Fract. of both thighs; knee joint opened	Died.
9.	Secondary	Fungus hæmatodes	Recovered.
10.	Secondary	Caries of patella, acute synovitis, etc.	Recovered.

None survived the primary amputations, and $\frac{1}{4}$ of the secondary died. The mortality, in all amputations of the thigh, was 40 per cent.

SUMMARY OF AMPUTATIONS OF THE LEG.

1.	Secondary	Chronic disease of the tarsus ostitis	Recovered.
2.	Primary	Injury in blasting	Died.
3.	Primary	Railroad injury	Died.
4.	Primary	Railroad injury	Recovered.
5.	Primary	Railroad injury	Died.

Only one survived after primary amputation of the leg, and that with difficulty, and after a tedious convalescence. We find, on taking both tables, that, out of six primary amputations of the lower extremities, only one lived, which is a mortality of $83\frac{1}{3}$ per cent., and that the mortality in the secondary amputations was 22 per cent. On combining both primary and secondary, we have a mortality of 7 in 15, equal to $46\frac{2}{3}$ per cent., in all amputations of the lower extremities.

We had, for some time, suspected that amputation, in all cases, was a formidable alternative; and in view of the awful mortality, after primary amputations, we are tempted to ask, if it would not be wise to refuse to operate in all cases of severe injury?

ART. IV.—*Cancer; the best local treatment, Compression; the best general treatment, Rigid Abstinence. Case of Scirrhous Breast successfully treated on these principles. New Surgical Instrument —Mammary Cancer Truss.* By M. L. KNAPP, M.D., late Professor of Midwifery, in Rush Medical College, etc., etc.

How happens it that so little is known of pressure in the treatment of cancerous affections? No mention is made of it in *Cooper's Surgical Dictionary*, the great work of reference that the medical practitioner is wont to consult when a rare case presents; no allusion appears to have been made to it in the late able report of Prof. Gross, on carcinoma, and no knowledge of its efficacy, I am confident, exists in the minds of professional men generally, for I have proved it by repeated conversations with physicians and surgeons, even professors of surgery, one of whom had been to Paris, in quest of professional knowledge. Now and then, one of the vanguard of the profession has told me he was aware of its utility, but had never tried it. I have not taken pains to refer to the standard systems of surgery, to see whether any thing is said of it or not. It is not taught in the lecture room, or there would prevail a knowledge of it among medical practitioners. Accident directed my attention to it. Having occasion to refer to the *Cyclopædia of Practical Medicine*, in the preparation of a medical paper last fall, I stumbled on the able paper of Dr. Carswell, on scirrhus, and having a case under treatment, gave the article a careful reading.

It appears by this, that pressure was used by Mr. Young, an English surgeon, many years ago—his cases having been reported and published in London, in 1816. Subsequently, M. Recamier, one of the physicians of the Hotel Dieu, of Paris, adopted the practice, and "of 100 patients treated by him, for carcinomatous affections, sixteen appeared to be incurable, and underwent only a palliative treatment. Thirty were completely cured by compression alone; and twenty-one submitted to the same means, derived considerable benefit from it. Fifteen got rid of the affection radi-

cally, by means of ablation alone, or chiefly by ablation, combined with pressure; and six by means of compression and cauterization. In the twelve remaining patients, the disease resisted all the means employed."

This is a better aspect of things, certainly, in regard to cancerous affections, than is generally entertained. The opinion prevails that true cancer is hopelessly incurable, and whether in private or hospital practice, if the progress and treatment of cases are watched, it will be found, I think, that little is attempted beyond early ablation, and later, palliative treatment.

Dr. Gross' report to the *American Medical Association*, presents a gloomy view of the subject, indeed, entirely at variance with M. Recamier's results. Indeed, under the full impression that his views reflected the true state of medical knowledge, I was about to abandon the hope of there being any relief for my patient, in whose fate I felt the deepest interest. I will briefly glance at his "conclusions on the value of surgical operations in cancerous diseases."

1. From Hippocrates to the present day, it is regarded incurable by escharotics, or the knife; nature never cures, and no hope from internal remedies.

2. Excision is nearly always followed by a return of the disease in a few weeks or months.

3. After ulceration, excision but hastens the fatal result.

4. If the tumor be of rapid growth, or large, excision but hastens death.

5 Operations for soft cancers still more hopeless than for scirrhus.

6. Of the cases reported, the history is too imperfect to afford basis for diagnosis.

7. Cancroid affections, as of the lip, less sure to return after ablation.

8. Notwithstanding the bare twilight of hope from ablation, in cancer, still, if done early, the profession are for it.

9. The cases reported cured are believed to have been tumors of benign character.

10. All agree, if ablation be resorted to, it is best to be thorough in removing all, even at the expense of healthy surrounding tissues.

11. Save enough integuments to cover, and heal by first intention.

12. Great stress laid by all writers on regulated diet, in preventing relapse.

13. No remedy or method of treatment known that will prevent relapse.

14. Occasionally a second operation has prolonged, and even saved life, but generally as useless as the first.

Not a word is said of the employment of any mechanical means for methodical compression, while Dr. Carswell, in the paper referred to, places it in the first rank of curative agents. The remedies that retard or arrest cancer, according to him, are direct or indirect. "Among the former, or those which operate directly, the local abstraction of blood, by means of leeches, and compression, holds the first rank." Of those operating indirectly, are short allowance of food, and those powerful alteratives that promote absorption. Thus an entire change is effected in the nutritive function, and rapid absorption promoted, both by suction into the system through a jejune condition of the blood vessels, and methodical compression upon the part after local depletion. Here is sound philosophy — pumping and forcing, pulling and pushing at the cancerous tumor, to get it back into the blood. While fluid, it is harmless; so long as it swims, and is not allowed to localize itself, all is well, even admitting it to be a disease of the blood.

This view of the treatment of cancer, presented by Dr. Carswell, is taken from M. Recamier's work, which I think has not been translated into English. I will, therefore, draw from it a few brief conclusions, as presented by Dr. Carswell, to stand alongside of those drawn from Dr. Gross' report.

1. The results of 100 cases treated in the Hotel Dieu, above quoted.

2. All tumors, benign, suspicious, or malignant, yield to the treatment.

3. Mammary tumors, put under this treatment before degeneration, will continue to recede, though the pressure be discontinued. If pressure is used after degeneration, and discontinued, the tumor again enlarges, and may be aggravated.

4. Compression aids in preventing relapse, after ablation.

5. Chronic inflammation is resolved by compression.

6. Tumors of the neck of the womb are resolved by methodical compression, by means of a conical thimble, or tube pessary.

7. The rational inference is, that if this practice were generally employed early in all external cancers, ablation would be seldom required.

The internal remedy most relied on by M. Recamier is *conium;* but *tonics* and *chalybeates* must be combined, to aid in governing the nutritive function, and to answer the indications of each particular case. About one-third the amount of food usually consumed by the patient is the allowance found most reliable. The decoction of sarsaparilla is the drink recommended. The alcoholic extract of conium, two grains, gradually increased to six, or even twelve, twice a day, on an empty stomach, and continued three or four weeks, is the form of administration of the cicuta.

Dr. Dunglison, in his note appended to this article, says not a word of compression, but remarks: "The cachexia is the real morbid condition, and the cancerous affections, in particular organs, are but so many evidences of it," etc.

Now, so far as treatment is based on this assertion, it must, if rational, err of its object. Nor do I think any cachexia precedes the local deposits. The cancerous matter seems to be the offspring of a redundant and pampered nutrition, and to be formed in the blood, and laid up (a blind and fatal mistake) by deposit, as fat is laid aside. The corpulent, or lymphatic habit, is most liable or subject to it. "In persons, too, apparently in the enjoyment of the most perfect health, we often see the disease making its appearance in the form of a small pimple, proceeding more or less rapidly in its

course, extending in breadth and in depth, and terminating ultimately in death, in spite of all the means which art has devised." So says Dr. Carswell, and of the *cachexia* he speaks as follows:—"It is in this, the last stage of the disease, that the circulation and innervation become deranged, and that fever and a diminution of the nutritive function are first observed. It is likewise at this period, but more frequently a few days or weeks before death, that the skin assumes a pale earthy, or dully ochry tint; that debility and emaciation make rapid progress, and all the functions of the economy become implicated in the deteriorating influence of the disease. It is this group of the general symptoms which constitute what is called the *cancerous cachexia*."

I say, then, to treat a case in high condition of general health with alterative tonics, nutrients, stimulants, etc., thinking to resolve thereby a local tumor, or true cancer, on the presumption that some latent cachexia lies at the bottom of it, would be a signal error. Starvation, almost, were more rational, and add to this compression, and hygiene in its most rigid requirements, and you reach the indications. Drugging with hydriodate of potash, etc., may resolve benign tumors, but it never will resolve malignant ones. I have little confidence in alterative drugging.

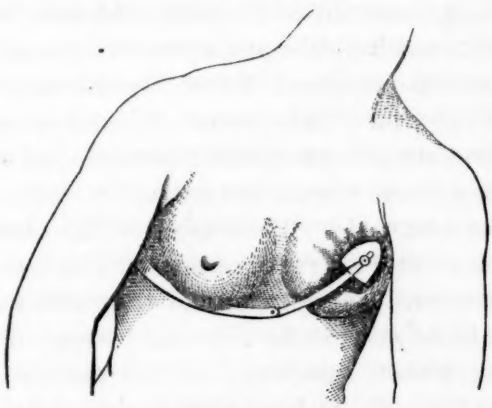
This matter or doctrine of a latent depravity, lurking in the constitution, and proving the cause of cancer, is as improbable as it is unphilosophical. The fact of cancer appearing locally, while the constitution is in full vigor, is far from being "evidence" of a cachexia, if Dr. Carswell has rightly explained what the cancerous cachexia is; but the cachexia is rather the witness-bearer or effect of "cancerous affections in particular organs." This is rational, intelligible pathology, and leads to correct treatment—opens the door of hope to the otherwise doomed victim. The other view is a mystification, a cloak for ignorance, a seal set upon any advance in practice, the pronunciation of the patient's hopeless fate. The propagation of such errors in medical philosophy, is what has so firmly established the general belief, that can-

cer is incurable, and that nothing can be done. That a particular temperament, or habit, or constitution, may be more liable to cancerous forms of disease than another, under a mode of living favorable to their development, is all that can be maintained by a sound philosophy, as inherent in the system. The doctrine of hereditary taint is a ball and chain upon the foot of medical progress. Like begets like organization. Like organization is liable to take on like pathological action, when its like physiological action is disturbed by like causes. This is all that can be maintained. Now, under this view, and the known power of regimen, or training, to entirely change the constitution—even the organization—no son of a cancerous parent stands in jeopardy, if his medical guide will put him in the right path, and he will but travel in it. The same of all other hereditary proclivities. This rational philosophy permits progress, stimulates science, and encourages hope.

CASE.—Mrs. M. J., of corpulent habit, florid complexion, sanguine-lymphatic temperament, aged about forty, and the mother of five children, consulted me on account of a hard tumor in her left breast, of the size of a hickory nut, in the fall of 1852. She had noticed the tumor during the summer previous, and a peculiar reclining of the nipple toward the arm-pit, or laying itself down on the tumor, which was close upon the axillary side of it, and situated deep in the substance of the mammary gland. Her breasts were well developed, and the glands retained a firmness of structure that gave evidence of a healthy and unimpaired constitution.

I put her under the administration of iodine locally and generally, making use of a tincture of double the usual strength for topical application, and painting the breast nearly all over, except in the more tender region of the nipple, thus obtaining a counter-irritant effect, and a peeling off of the cuticle, after a few days. This was regularly repeated about once a week. Its administration internally was continued for three months, in small doses—two or three drops twice a day, of the same tincture. No beneficial effect was apparent.

For a twelvemonth the tumor continued steadily to advance, when it had attained to about the size of a hen's egg; the sub-cutaneous cellular tissue had become involved, and adhesion to the skin was apparent from the puckering that it presented, on moving or handling the breast. Sundry nodulated protuberances could be distinctly felt. Shooting pains were frequent, and becoming more and more troublesome. At this juncture, December, 1853, the case was examined by two distinguished professors of the Medical College of Ohio, and their opinions accorded perfectly with my own, that the tumor was a true scirrhus.



The general health of my patient being perfectly good, and the gloomy prospect from ablation, as per Dr. Gross' report before me, and the more cheering hope from Recamier's practice presenting, I put the patient under restricted diet, five grains of the hydriodate of potash, twice a day, and local compression by means of a pad worn in the body of her dress. This course was pursued two months with steadiness, when it became evident that the tumor was receding. The adipose tissue of the system was considerably reduced withal. Finding it next to impossible to maintain a uniform methodical compression upon the tumor, night and day, the power of an elastic steel spring truss suggested itself, and after repeated trials, I at length devised a perfectly adapted instrument, as seen in the above cut.

This instrument may be said to be a Hull's truss, with a joint in the front part of the spring, to adapt it to the specific purpose and location. The joint is rather firm, requiring considerable force to vary the angle, so that when a true fit is attained, it remains permanent. It thus adapts itself for either breast, and it may be worn equally as well with the spring encircling the chest above the mammæ, and the obtuse angle at the joint pointing upwards, in the centre of the sternum, and the branch descending to adjust the pad upon the tumor. The pad, in this case, may be represented by the longitudinal section, centrally, of a hen's egg, one half of it being adopted for the pad, the rounded, stuffed side worn upon the tumor. To prevent hurting the nipple, I found it necessary to lunate the heel of the pad. The power of the spring, when *in situ*, is about that of one pound pressure, perhaps a little greater, being made from sheet steel, No. 22, and three-eighths of an inch wide. The temper of the branch portion is left unset, so that it may be more or less incurvated for exact adjustment. The curvature of the whole spring must, of course, be adapted to the size and shape of the chest, so as to fit without pinching. It is worn over the chemise, except the pad in front passes under to be applied to the tumor accurately, the bosom of the chemise, and waist of the dress aiding in sustaining the truss in its proper location. A soft compress, or two, of fine linen, or muslin, wetted in water, is kept upon the tumor, under the pad. The back pad is made very thin, so as not to show through the dress, and rests upon the muscular cushions, or either, or both sides of the spine.

This admirable arrangement of mechanical powers to the object in view, I believe to be new, and of great value in this department of surgery. It may be adapted to any form of mammary tumor, large or small, and when it is considered that cancer of the breast is the most frequent form of external cancer, its importance will be duly appreciated. The principle may be adopted in other forms of ex-

ternal cancer, and a truss adjusted by any ingenious practitioner to meet the wants or exigencies of each particular case. It appears to be equally applicable to encephaloid, scirrhus, and colloid cancers, and not only to these malignant tumors, but also to benign tumors, as wens, etc., etc. Its applicability to aneurismal tumors is obvious.

I am aware that gum elastic bandages and gum elastic bags partially inflated, have been used in making compression in the treatment of mammary cancer. I tried them faithfully in the case under consideration, and found them troublesome, oppressive, and inefficient. I find, practically, the truss is infinitely superior. It is worn night and day with perfect comfort, retaining its position without fillets, or straps and buckles of any kind, and possesses a capability of adjustment equal to a pair of spectacles. The Messrs. Rees, of Cincinnati, surgical instrument manufacturers, were the makers of the trusses I used, and were very accommodating, and faithful in executing my designs, until perfect adaptation and artistic finish were attained.

This will doubtless be read by practitioners, who, at first thought, will be surprised at the idea of putting a truss on a cancerous tumor! The doctrine is not generally promulgated that such a course of treatment is called for, or even admissible. Still it is not only defensible, but in truth *the only rational treatment.* Cancerous tumors appear to progress slowly or rapidly, according to the solidity or laxity of the textures in which they are situated, as a general rule, other things being equal, and hence it is perfectly rational to oppose their progress of growth towards the surface, and tendency to point and become open cancers, by suitable mechanical resistance. So far from being irritated by the practice, they take it kindly and without complaint or remonstrance, judging from the single case I am recording. It is not necessary the pressure should be great, but constant; and I have no doubt, but that local depletion by means of leeches may be advantageously used simultaneously, as recommended by M. Recamier, but it is both expensive and

troublesome, and, therefore, I omitted it, and trusted to low diet and wet applications instead.

To proceed with the further history of the case before us: it was about the first of March last, that I brought the power of a suitable truss to bear upon the tumor, after many repeated efforts and trials of mechanical skill. The patient had fallen away some under a short allowance of food, and a constant use of the hydriodate of potash. The conium was now substituted for the hydriodate, and a rigid adherence to a very abstemious diet insisted on. Not over one-third the usual *quantity* of food taken was permitted, but every indulgence of a reasonable nature allowed as to *variety*, indeed, variety was insisted on, and the best quality of food of its kind advised. This course was pursued about six weeks, when it became manifest that the general health of the patient was giving way under the use of the conium, or drugging system. Commencing with two grains, twice a day, of the alcoholic extract dissolved in water, and increasing the dose daily, the patient had now been about two weeks under the power of six grains twice a day, when the general distress of the system became evident, by subsultus tendinum in almost all the voluntary muscles, whether the patient were awake or asleep. The irritability of the muscles was so great, that I noticed repeatedly the quivering of a single muscle of the wrist or ankle, like a gib-sail thrown into the wind. Now and then, a severe and prolonged cramp would seize upon a muscle. This derangement of the general health of my patient by narcotic poisons I deemed unphilosophic, the true course appearing to me to be the maintenance of as high a state of the general health as possible, under so limited a diet as to promote active absorption. Accordingly I discontinued all drugging, and put the patient under the best system of hygienic rules I could suggest, such as early rising and walking, riding, rambles in the country, bathing, flesh-brushing, dumb-bells, visiting, and every possible method of agreeably engaging and occupying the attention; the diet being augmented to one-half the ordinary

quantity taken. Under this regimen the patient soon rebounded from the downward tendency, and began to express the utmost gratification. I should have observed that, during the drugging period of treatment, in March, the menstrual flow ceased, the greatest regularity having always prevailed. This was a staggerer. The patient had not been enceinte for ten years, though in good health, and living with her husband in the most unquestionable harmony, and was content to believe that it was "the turn of life" with her, in which opinion I encouraged her, at the same time doubting the fact. Her health and spirits went on improving daily and weekly, and the scirrhus tumor kept receding and "flatting out," literally, until a sub-stratum of it, like a flat piece of shred leather, only remained. Since the first of May, she has seemed and felt perfectly rejuvenated. Always accustomed to a full diet and rather sedentary habits; she is completely changed in her feelings, and astonished that her greatest enjoyments now are those habits she never could adopt or find other than irksome, and destructive of daily comfort if indulged in, such as early rising and walking particularly.

About the middle of July, the fact of pregnancy became established by the motions of the fœtus being felt. It would appear, then, that this patient has been above the breeding point for the last ten years, and that her corpulency tended to the formation of cancerous deposits. There could be traced no hereditary taint whatever, admitting the truth of the old fogy dogma. It would further seem that nature, ever desirous to preserve the species, took alarm at the downward tendency of the patient's health, and determined, if possible, to cast off a shoot. At all events, conception took place, whatever the law of nature may have been, about which it may be idle, perhaps, to speculate.

The question of paramount interest, in this case, now is, What will be the proper course to pursue, when lactation takes place in the affected breast? The remains of the tumor are there, although there is a chasm in the gland, equal to the size of the truss pad, or one-half of an egg. The nipple

is underlaid by the hardened margin of the indolent remains of the scirrhous tumor, and, though nearly liberated from its retraction, is still partially held by the contraction of the tissues. Inasmuch as this is a very important portion of the gland, the lactiferous ducts being conveyed to this point, and probably rendered impervious by the lesion present, what course will be most proper and rational to adopt for the welfare of mother and child? Should the future offspring be allowed to draw nutriment from this breast, provided the function shall be found to be but slightly impaired? Will the exercise of the function of the organ have a tendency to awaken and renew the scirrhus development? May mammary abscesses be rendered probable from obliteration of the lactiferous ducts? Admitting the doctrine of hereditary taint, would the child's chance of future escape be improved by removing it from the mother altogether, and substituting a wet nurse? Sundry interesting points are involved in the issues of this case, which, having no parallel precedents to govern my practice, will have to be met on what may appear to be the most rational and sound principles.

It is conceded that this case was a favorable one for success under this new method of treatment. How far it may be a type of scirrhus in general, I will not pretend to say, few cases having fallen under my observation; yet I am inclined to think it neither singular, nor unlike numerous others of this class of disease, that either run into open cancer, or are cut away by the surgeon, only to re-appear in the same or some other locality. At all events, the case is instructive, in the illustration it affords of the resources of mechanical surgery, and the efficacy of a rigid hygiene in fundamentally changing the constitutional habits. "One swallow does not make a summer," to be sure; but if this practice were acted upon *generally* by practitioners in the incipient stage of cancerous tumors, I have reason to believe there would be many swallows of this kind, enough to make a summer of promise and hope to a large class of otherwise doomed sufferers.

CINCINNATI, *August*, 1854.

NOTE.—In connection with the foregoing interesting discussion of the treatment of cancer by compression, we would remark that the author, though *original* in the adjustment of a truss to the tumor, with which to make compression, cannot claim *priority*. It appears, from Dr. Walshe's great work on the *Nature and Treatment of Cancer*, p. 209, that Dr. Neil Arnott, more than ten years ago, invented an instrument for this purpose, having attached an air-cushion, which is thus described: "His apparatus consists of a spring, an air-cushion supported by a flat resisting frame or shield, a pad, and two belts. The spring, which is of steel, is the compressing agent, its strength being varied with the amount of pressure it may be desirable to obtain. The shield, varying in shape, somewhat, with the circumstances of particular cases, is generally slightly convex on the external surface, of circular or oval outline, and formed of a rim of strong wire, connected at two opposite points by a flat piece of iron, which serves for the support of the spring, screws, etc., the whole being covered with jean. To the rim of this shield is sown a sort of conical cap of soft linen, designed to receive the air-cushion, to keep it constantly slack, and prevent it from slipping about when applied. The air-cushion thus kept slack, fashioned into a sort of double nightcap, lying in apposition with the inner surface of the shield, and sufficiently filled with air to prevent the latter from pressing directly on the part which receives within it the tumor to be compressed. One end of the spring is attached by screws to the external surface of the frame, and the other end to a solid, but soft pad, placed wherever the contre-pressure is to be made. The straps are used to keep the apparatus steadily fixed."

Dr. Walshe speaks very favorably of compression, and remarks that the chief reason why it has not taken its ground as a general system of treatment, is the difficulty of its application. This difficulty, he thinks, is triumphed over by the invention of Dr. Arnott.—[*Eds. N. Y. Jour. of Med.*

ART. V.—*Falls from Heights, with Cases Illustrative of some peculiar consequences of Cerebral Concussion, etc.* By ELISHA HARRIS, M.D., Physician to the New York Dispensary.

THE following cases serve to exhibit some of the more unusual effects of falls from heights, while they happily illustrate the remarkable impunity with which such accidents are sometimes sustained, especially in young children.

CASE 1.—*Fall of a Child from a fifth story window. Fracture or Diastasis of the Segments of the Superior Maxillary and the Palatal Bones, with but slight Concussion of the Brain.*

J. M., a boy, æt. 2 years, while playing in the vicinity of an open window in the fifth story of a dwelling-house, about six weeks ago, was precipitated upon the pavement in the court-yard below—a distance of some fifty feet. When taken up, he presented the usual symptoms of concussion of the brain, but when first seen by the writer, a few hours after the accident, the little fellow was partially restored to consciousness, and, so nearly as could be ascertained, there had occurred no vascular reaction. His pulse was feeble, and he seemed greatly exhausted from the loss of blood which he sustained from the mouth and nostrils. Upon examination, the head was found to have sustained no injury externally, except a severe contusion over the left temporal and malar regions; but, in the mouth, it was discovered that the superior maxillary and the palatal bones had been riven asunder on the median line, and that the segments of the latter bone were so widely separated that I inserted my fore-finger in the cleft, the soft parts being torn from the alveolar margin back to the velum palati. The ethmoid bone had also suffered some damage in its inferior portion, but no further injuries were discoverable. For some days after the accident, deglutition was rendered somewhat difficult, by the excessive tumefaction of the soft palate and velum; but aside from this, no unpleasant symptom supervened until after the expiration of the first week, when considerable collections of pus formed above the palatine arch, and were

discharged through the cleft. Some spiculæ from the ethmoid bone were thrown off in the process of this suppuration. The ductus lachrymalis of the right side has at various times become obstructed from suppuration in its vicinity, and has required relief. At the present writing, suppuration has nearly ceased, and it is proposed, as soon as practicable, to attempt a re-union of the cleft edges of the palate, so as to restore the mouth and nostrils to their normal relations. It is believed that this may be readily accomplished by means of Sims' clamp suture.

CASE 2.—*Fall from a height of* 60 *feet. Grave Concussion of the Brain and Depression of Skull, with Symptoms of Cerebral Compression. Recovery after four days, without any sign of Vascular Reaction. An attack of Epilepsy six weeks subsequent to the accident. Final perfect Recovery.*

H. V., a boy, aged 11 years, in August, 1850, fell from the top of a new, unfloored building, on Broadway. His head struck upon a stone in the cellar, which caused a severe contusion of the scalp, and an apparently great depression of the skull. When taken up, he was found to be cold, and nearly pulseless, and in this condition, with a slight increase in the pulse, he remained for more than twelve hours, during which time he frequently vomited. The breathing was occasionally stertorous during this period, and the eye seemed insensible to light. At the time I was called to take charge of the child, 16 hours after the accident, I found him profoundly comatose, pulse feeble, and beating only 50 per minute; the pupil extremely dilated, and the eye insensible to light; the extremities cold, and the head hot. On the left temporal region there was a well defined contusion, but the areolar tumefaction was so great, that it was impossible to determine whether any fracture of the skull had occurred. He continued utterly unconscious and in a lethargic sleep, until the expiration of the twentieth hour after the fall, when he began to exercise the power of vision, but it was not until after 36 hours that he became obviously conscious. Until this time the pulse had continued very feeble and slow,

ranging between 50 and 60 per minute, and the pupils had continued largely dilated. On the third day, the pupils became somewhat unnaturally contracted, but there was no marked vascular excitement, and the reaction, though complete, was so gradual as to be unobserved from hour to hour by the attendants. The period of reaction and restoration to perfect consciousness, extended from the 56th to about the 90th hour, inclusive. On the 5th day from the fall, though very feeble and excessively irritable, the lad appeared to be perfectly well. At this time, the tumefaction about the contusion had so far subsided as to enable us to determine the fact that there was a fracture of at least the outer table of the skull, and this fractured section was so much depressed as to render it highly probable, that the inner table was considerably impressed upon the brain.

The boy's health continued perfectly good during a period of six weeks after the injury, when he was attacked with epilepsy, which subsided after 48 hours, during which time he had three seizures. From that to the date of the present writing, he has continued perfectly healthy; though for a year or more subsequent to the injury, he was peculiarly nervous and irritable. The apparent depression of the skull has never been completely removed.

CASE 3.—*Fall, and violent Concussion of the Brain. Restoration to Consciousness on the third day. Recovery without any Vascular Reaction.*—J. M., a young man, aged 23 years, while engaged in adjusting a plank in an unfinished edifice, on Broadway, lost his balance, and was precipitated into the cellar below, receiving the force of the fall partly upon the left temple, and partly upon the left shoulder, producing a luxation of the clavicle at its scapular articulation. The cerebral concussion was extremely violent; the vomiting and supervening coma were marked. The pulse continued soft and natural, though somewhat slow. The pupil was contracted. He continued in the condition above described for thirty-six hours, when he began to awake to consciousness. After four days he was fully restored, and at no

period was there any noticeable degree of vascular excitement or reaction.

CASE 4.—*Fall of a Child, when playing upon an elevated platform. Concussion of the Brain. Sudden restoration of Consciousness, after ten hours of profound Stupor. Intellectual operations resumed at the exact stage at which they were arrested by the Fall.*—C. C., a girl aged 6 years, a few days since, while indulging in gay hilarity with her playmates, tossing and catching playthings to and from them, on the pavement below, failed to notice something that was thrown her, and while hurriedly seeking for, and inquiring about it, made a misstep and fell upon the pavement. The cerebral concussion appeared to have been violent, and she was watched with much anxiety until about the ten hours after the accident, when she, for the first instance, opened her eyes, and manifested signs of consciousness; then instantly jumping to the margin of her bed, she exclaimed: "Where is it?" "Where did you throw it?" and immediately commenced throwing little articles from her dress, exclaiming, "Catch these!" By these acts she was manifestly continuing those intellectual operations which had been so suddenly arrested by her fall from the platform.

No marked vascular reaction occurred in this case; the pupil was very much contracted during the first six hours of the period of concussion, the pulse soft and hurried; she vomited much, but did not open her eyes at any time until the moment of her sudden restoration to consciousness. Her recovery was perfect from that moment.

The peculiar point of interest in the foregoing case, induces me to give a brief sketch of a still more highly instructive case, as illustrative of some very important and interesting psychological laws. I received an account of the case some time since, while on a visit to the neighborhood where it occurred.

CASE 5.—*Violent Concussion of the Brain. Entire loss of all Consciousness of any previous period of Existence, and of all former Acquirements in Knowledge. Recovery, with the Intellect*

in a Perfect, but Infantile Condition. Complete Restoration, after Several Months, of all former Intellectual Attainments.—Rev. J. E., a clergyman of rare talent and energy,—a man of sound and extended education—while riding through his mountainous parish, was, by a casualty, thrown violently from his carriage, and received a violent concussion of the brain. For several days he remained utterly unconscious, and at length, when restored, his intellect was observed to be in a state like that of a naturally intelligent child, or like that of Casper Hauser, after his long sequestration. The good man again, but now in middle life, commenced his English and classical studies under tutors, and was progressing very satisfactorily, when, after several months' successful study, the rich storehouses of memory were gently gradually, yet very rapidly, unlocked, so that in a few weeks thereafter, his mind resumed all its wonted vigor, and its former wealth and polish of culture. For several years he has continued his labors as a pastor, and has suffered no symptom of cerebral disturbance.

I am informed that the first evidence of the restoration of this gentleman's memory, he experienced while earnestly attempting the mastery of the Greek verb, an intellectual effort well adapted to test the penetrability of that veil that so long had excluded from the mind the light and the riches of its former hard-earned possessions.

The reader will, perhaps, recollect several cases somewhat analogous to this, as mentioned by Hennen, Larrey, Sir Astley Cooper, and other surgical writers.

CASE 6.—*Leap from a third-story window, during an Attack of Puerperal Mania. Considerable Cerebral Concussion. Slight Injuries. Immediate and perfect Restoration from all Mental Aberration, and speedy Recovery.*—Mrs. M., aged 26, some ten days after confinement, resumed her usual household labors, and being a feeble woman, and of an irritable, nervous temperament, she had the misfortune to sink into a state of acute puerperal mania. She was not often violent, but being constantly tormented with the most terrific panophobia, she fre-

quently made vigorous attempts to escape from her countless imagined adversaries. This state of things had continued about one week, when she leaped from a window of her apartment, in the second story, upon the pavement below. This act she repeated on several successive days, and on each occasion she was immediately secured, and quieted in her room. Again she repeated her efforts to escape; she leaped into the street, ran several blocks, entered a large warehouse, ascended to the third story, and fancying herself still hotly pursued by her foes, she leaped from a small ventilating aperture, through which she could scarcely press her way, and the narrowness of which served to break her leap, and cause her partly to fall upon a low shed beneath. She was severely stunned by the force of the fall—says that she "saw stars and felt very dizzy;" she was for a few moments insensible, but in a short time became perfectly conscious, and returned to her home clothed in her right mind.

It was immediately after this daring hegira that the writer first saw this patient, when he found her very much exhausted, timorous, but not particularly excitable; the countenance was placid, and the expression of the eye full of life. She expressed great joy and devout gratitude for her safe escape from the great perils of her frenzied flight and leaps, as well as for her delivery from the dreadful panophobia which had driven her to such heroic daring.

Her restoration to health was speedy and complete, and there has been no recurrence of any symptom of mental aberration. The question whether the sudden and happy restoration in this case was simply a result of the moderate concussion that the brain sustained, or whether the consequence of a more general shock, which the whole body suffered, or whether to be attributed to the enlarged and uncontrolled freedom that she enjoyed during her flight, the writer does not attempt to determine; though it appears highly probable that it was owing mainly to the cerebral concussion, for, on several previous occasions, she had made equally heroic attempts to escape, but never before had sustained any appreciable degree of cerebral concussion. She says that it

was only in this broken leap from the third story of the warehouse, that she ever felt any stunning effect, or was for a moment rendered unconscious.

There are some interesting psychological facts involved in the history of the last three cases that we have here detailed, which we may discuss at some future time, in connection with other cases of an analogous character; but we would in this connection, only call attention to one or two of the more practically important facts observed in the history of these cases.

It was observed in the first four cases, that recovery from severe cerebral concussion took place without any marked vascular reaction, though no measures were pursued to prevent such an event. In the third case mentioned, the young man was laid in a darkened and cool parlor, the head frequently bathed, and a little ammonia and milk occasionally administered. In several cases of cerebral concussion, occurring in children, the writer has witnessed the happiest recovery under similar circumstances. But what might have been the history of these cases, had the old practice of venesection and local depletion been resorted to, we cannot say; but it is probable that there would have occurred some degree of violent vascular reaction, and possibly some subsequent, if not *consequent*, cerebral inflammation. Vascular depletion during the stage of shock or depression, manifestly may be, and I believe it has often been, the cause of cerebritis occurring after cerebral concussion.

In the history of the second case, we see illustrated the safety and propriety of waiting for the full developments of the facts and events in such cases of injury, with probable cerebral compression, before attempting surgical relief.

Lastly, we see illustrated in several of these cases, the wonderful impunity with which falls are sustained by children, the remarkable and wisely designed protection which the brain enjoys, and the happy capacity of nature to protect the most important organ of the body against perils to which it is exposed, as well as to restore it from the most violent injuries received.

ART. VI.—*Extracts from the Report of the Proceedings of the New York Pathological Society.* (Selected and prepared by Committee of Publication.)

Specimens and Cases, by A. CLARK, M.D., Prof. of Physiology and Pathology in the College of Physicians and Surgeons.

Heart Clots.—Prof. Clark presented a specimen of polypus of the heart, and remarked that he found so many of them that he could match all the polypi exhibited to the Society. This was not so white as others which he had exhibited, but it had the same kind of attachments. The man from whom it was taken was under observation but a few hours. He was very intemperate. Came into the hospital in the morning with pneumonia and capillary bronchitis, and died the same evening. This clot was found in the right side of the heart. One of the folds of the pulmonary valves was torn in two places. How this lesion occurred he did not know; it did not seem to be recent. The two openings through the valve could still be seen, one of which showed very well. An interesting point in regard to them, was that this polypus had insinuated itself into these openings, as also one higher up, and completely filled them. This clot was firm and somewhat more bloody than usual; he exhibited it as presenting the ordinary firmness of those usually supposed to have formed before death, though it had evidently occurred after death.

Waxy Liver.—Prof. Clark then remarked, that at the last meeting of the Society, he presented a specimen of what was sometimes called *waxy liver*. These specimens were rare, but he now had another to exhibit. The appearance was very much like that of the one formerly exhibited. This specimen, however, differed somewhat from the other, as a few of the cells contained a small amount of fatty matter, while the larger part of them are free from fat and seemed to be a new production. He supposed this ought to be called the "waxy liver," and yet there seemed to be some diversity of nomenclature. The "scrofulous liver" would perhaps better bring it within the range of the description of such cases. In this instance, however, there did not appear to have been any scrofula. The person from whom it was taken, had syphilis at the time of her death. The point of interest was whether she had syphilis and had been long treated with mercury, or whether she had scrofula. The specimen presented at the last meeting was a very good illustration of this point, for the man had scrofula as seen from two large ulcers under his arms, and

also had had syphilis and had been treated actively with mercury. In both instances there was a considerable amount of abdominal dropsy; in the last it was extreme, and was supposed before death to depend upon cirrhosis, but on post mortem examination this condition presented itself.

In regard to the character of the deposit, he did not think that any writer had fallen upon its true nature. Dr. Bennett had probably come nearer to it than any other writer, and he seems disposed to conjecture that there was a change produced in the cells of the liver after the absorption of fat; that it was a later stage of the fatty degeneration: that, in truth, the oily matter had been taken up and the fatty cells left. Dr. C. did not regard this as a fair explanation. It seemed to him that by the enlargement of this liver, producing the hardness observed in it, a new production of a peculiar nature resulted. He thought these cells were not deposited like ordinary cells in the tubes, but that they were diffused, obeying no particular rule. To enforce this statement he introduced a portion of the mesentery for the purpose of exhibiting the glands. These were swollen, many of them, of the size of a bead, were easily turned out from their beds; they were not remarkably hard, having no appearance of any heterologous deposit like tubercles, but still they were enlarged and pale. He found exactly the same material in great abundance that was observed in the liver; the cells were not found in the tubes, but in the fibrous tissue. The stroma of the glands running between the tubes seemed to be infiltrated with these cells. In order to ascertain if possible the nature of this deposit, whether it was a peculiar form of fatty degeneration or some new undescribed form, or, whether the reaction of chemical agents would be the same upon animal tissue, he treated sections of the part containing the cells with rectified sulphuric ether, in expectation, if it was fatty, that it would be dissolved. No change whatever was produced. He then employed boiling ether, but still no change was effected. They were next treated with strong acetic acid; this seemed to render the cells more transparent, but they remained entirely unchanged in form. This maceration was continued for an hour, and to be sure that the experiment was well performed, he placed a quantity between two plates of glass, but observed no change in their form, though the tissues about them were much more transparent, the fibres being then less distinctly visible than before. He then macerated them with boiling alcohol, which produced no change, though it reduced the sections to the consistence of spermaceti. Finally they were treated with nitric acid of various strength, and it was observed that, when the

acid was sufficiently strong to dissolve animal fibre, they did change, but when it was of less strength, they did not. This proved that they were animal in structure, and of a peculiar and undescribed form. In regard to their distribution, he said that they were so evidently distributed outside of the tubes and in the midst of the fibres in the glands, that the opinion which he had formed from the examination of the liver alone was probably a correct one.

Adherent Pericardium.—Prof. Clark exhibited a heart with the pericardium attached, which had been the seat of pericardial inflammation. The effusion of lymph was seen on both surfaces. There were two points of interest in the case; one, that it was associated with Bright's kidney, and meningitis, the last disease being apparently the fatal one. The second point was that, while attempting to catch the friction sound, he observed that at the height of an inspiration he could hear the second friction sound, while in the other portions of the respiratory act he could not hear it at all. He then directed the patient to take a full inspiration and hold it while he listened, when the increased distinction was so marked that no one could fail to recognize it almost instantly. The second sound was clearly developed by the procedure, while it was scarcely recognized in ordinary respiration. It occurred to him that this might be accounted for by the fact that the air, when we hold it in our lungs, is placed under considerable pressure, particularly when the lungs are partly filled, and, as a consequence of that, there would be a closer apposition of the pericardial surfaces than under circumstances of free respiration. He had had two opportunities, since this case occurred, of verifying this observation. In one it was perfectly clear, and in the other entirely absent. One was connected with a considerable amount of serous effusion, so much as to make the somewhat pear-shaped tumor which is frequently observed. This man did not give the peculiar sound at all; it could not be perceived at any period of the disease that these particular sounds could be heard any more distinctly in one portion of the respiratory act than another. But in a child suffering from pericarditis, he noticed that when it took a full inspiration the friction sounds did not seem to be very much heightened, but when it took a half breath they were heightened.

Prof. Swett remarked that he had never seen an allusion to this method of obtaining the second friction sound, but he had very recently had a case in which he observed that the friction sound became intense just at the end of an inspiration. He also had a case under treatment, in which these sounds came out clearly just at the end of an

inspiration, but were not distinguishable at other times; he had not, however, made it the subject of reflection. *April 13th*, 1853.

Chagres Fever complicated with Pneumonia and Bright's Disease.—The patient, a man, was received into Bellevue Hospital, suffering from Chagres fever. At the time of his admission, it was not known that there was any complication. He was in the Hospital about two weeks. Two days before his death, it was observed that his respiration was difficult, and that he was becoming stupid. The house-physician discovered, on examination just before death, that he had pneumonia, and that his legs and hands were swollen. His urine was tested, and an appreciable quantity of albumen was found, so that he had Chagres fever, pneumonia, and what is called Bright's disease. On post mortem examination, two days after these facts were noticed, it was found, that the left lung had undergone a very marked change, but the appearances were so little like ordinary pneumonia, that the house-physician concluded that his diagnosis was not correct. The lung was not crepitant in the least, though it was soft and flabby; about two-thirds of the lung, was in the condition described by Cruveilhier, as carnification. It was evidently the result of pneumonia, but probably the exsanguinated state of the patient interfered with the full development of hepatization. There was a small amount of fluid in the pleural cavities, which was probably effused during the last hours of life. The liver had the bronze color that is so common, but it could be bent about and rolled into a mass. If it hung over the edge of the table, it would hug the side like a wet rag; it was a little under size weighing three pounds and three ounces. The heart had undergone very much the same kind of softening as the liver, and was of a yellow hue; it bore a striking resemblance to hearts which have undergone fatty degeneration of the muscular tissue. The spleen ran away from the hand like water; half of it was absolutely fluid, while the remainder was so soft, that it could be broken down into a pultaceous mass. The softening was much more marked than it is ever seen to be in typhus fever. Another remarkable point, was the condition of the kidneys; they were very small, of a dark hue, and together weighed seven ounces. The first kidney opened, gave exit, without pressure, to pultaceous matter resembling that which escapes from the spleen in bad cases of typhus; the color of the cut surface, was brown mingled with gray, and in the latter were observed the granulations of Bright's kidney. The other kidney was not at that time opened, but on pressing it, the fingers would nearly meet from the opposite surfaces; the capsule contained gas of some kind, which

must have resulted from decomposition, as it could not be forced out. The autopsy was made 36 hours after death, and it could hardly be supposed that at this season of the year, would have commenced so early. The structure of this kidney was the same as the other, except that the degree of decomposition was somewhat less; the tubular portion was much less diseased than the cortical, and retained a good deal of its natural appearance. On examination with the microscope, the tubes were all found to be very granular, though there was no fat in them. It was not fatty degeneration then. The tubes were filled with granular matter, and there was not a single secreting cell in the whole of this pultaceous mass. Every cell had lost its nucleus, and the old cells seemed to have been changed or discharged by the bladder, and new cells in the debilitated state of the system, could not be produced. The cells were not round, but elongated in both the tubular and cortical portions, and were filled with a new and distinct form of cell lining. There was no pus, or fibro-plastic cells in the tissue. *April 27th*, 1853.

Apoplexy.—Thomas Connell, aged 48, native of Ireland, laborer, was admitted to Bellevue Hospital, on the 17th of Oct., 1853. As nearly as could be ascertained, the patient must have been drinking very freely for some weeks previously, but his health seemed to have been good up to the week before his admission to the Hospital. Neither he or his friends could give an intelligent account of the commencement of his sickness. On admission he was delirious, and walked with an unsteady gait, having much the appearance of a man intoxicated, but on examination he was found not to be in that state. Soon after being put to bed he became quiet, the pupils were contracted, pulse slow, small, and compressible, numbering 50 per minute. The skin was rather cool; he coughed a good deal, and a physical examination proved the existence of general bronchitis. The breathing soon became sterterous and he could not be roused. He was ordered half an ounce of brandy and a stimulating expectorant. Oct. 18th. The pulse had risen to 65, and was full and strong; the pupils were still contracted and insensible to light; tongue brown and dry. He ate moderately, and when asked how he felt, replied, "very well," but was still unable to give any account of himself. His bowels had not been moved since his admission. The brandy was discontinued, and an ounce of castor oil given; three grains of quinine were also ordered. He continued in this condition until the afternoon of the next day, when he again became apparently comatose, the pulse falling to 40 beats per minute, and the breathing becoming loud and sterterous.

On the 20th, his condition was much the same, but during the night it was again found necessary to give him brandy, the pulse having become scarcely perceptible. This alteration of symptoms continued, unimproved by tonics and stimulants, and he sunk rapidly and died on the night of the 21st.

Autopsy, 13 hours after death.—The dura mater was found much darkened by congestion of its blood vessels; between that membrane and the arachnoid, over the summit of the cerebrum on each side, there were two and a half ounces of uncoagulated blood enclosed in a patch of false membrane. The upper surface of the brain was much flattened by compression; the lungs and heart were healthy; the kidneys were congested but otherwise natural; the other viscera healthy.

Dr. Clark considered the occurrence of coma with stertor so markedly intermittent, as to lead to its being attributed to the congestion of intermittent fever, and for which quinine was administered, as one interesting fact in the case; and the effusion of blood which did not coagulate, and which may have been effused a week before admission, another. The effusion seemed to have been into the cavity of the arachnoid, immediately underneath the dura mater, and to have formed for itself an investing membrane. On close examination of the dura mater, he could separate a layer which he believed to be the arachnoid; if this be the case, then the whole dura mater covering the effusion, is lined by the arachnoid, and it is impossible to account for the membrane which encloses the unaltered blood, lying unattached to the cerebral arachnoid, unless we consider it false membrane, and yet the tissues investing the blood would scarcely appear to have been formed in 6 days. The limiting membrane was useful in preventing the farther extravasation of blood, and favoring subsequent absorption. He could scarcely suppose that the arachnoid could be separated into layers, one of which should embrace the cyst.

Hypertrophied Heart.—This specimen weighed 32 ounces; the chief enlargement was in the left venticle, caused by disease of the aortic valves, two of which were so thickened and attached to the aorta as to admit of regurgitation. The patient was examined in the last stages of the disease, when diagnosis of the valvular lesion had become, as is usual, very difficult. Dr. C. remarked that he had been making some investigations to determine the mode of development in these cases of hypertrophy of the heart. He had taken a healthy heart weighing 9 ounces, and compared 50 of its fibres with 50 from this hypertrophied heart weighing 32 ounces. If there had been an increased development of fibre, those of the hypertrophied heart should

measure under the microscope three times as much as those of the normal heart, whereas they did not differ materially in size. The conclusion would be, therefore, that the growth of muscle demands the development of new fibre.

Encephaloid Disease in a Child.—The child was fifteen months old, and had been affected some four months with marked symptoms of tabes, but had suffered from general ill-health for a much longer period. The tumor became evident to the touch within the last three months. The mass occupied the whole of the abdominal cavity, and pressed up the liver, and with it the diaphragm, thus encroaching greatly upon the cavity of the thorax, and extended downward into the pelvic cavity, and was prolonged on the left side through the abdominal ring. On opening the abdomen two very large tumors were discovered, one fluctuating, and the other persistent. From the fluctuating mass flowed a wash-hand basin full of contents of a semi-solid consistence, similar to softened brain, and some of a more fluid glaring character. The mass appeared to be enclosed in the layers of the mesentery, though it involved other abdominal organs; the left kidney is affected, but the right is not; the liver is not involved, though there is a nodule near its free edge, which, from its color and other characters, is probably tubercular. Regarding only the many distinct tumors, enlarged mesenteric glands, and the miasmatic condition of the child, we might be led to consider this a very ordinary affection; but when we notice that the left kidney is involved, the immense size of the mass, its implicating many structures, and its rapid growth,—a different conclusion as to the primary origin of this disease may be arrived at. He was disposed to believe that it originated either in the mesentery, or left kidney. There can be no doubt that the disease is the softest variety of encephaloid; the fluid was transparent and ropy, with rounded, granular cells, somewhat smaller than those in the mass. These cells have a diameter somewhat larger than blood corpuscles. The interesting points are: 1, the development of so large a tumor in so short a space of time; 2, the uniform character of the large mass; 3, the resemblance between the fluid and solid portions of the disease under the microscope.

Scirrhus (?) *Pancreas.*—Specimen presented by Dr. Clark, for Dr. McPhail, of Brooklyn, with the following history: This patient was a married woman, 37 years of age, and the mother of five children. She first came under my care some three months since, laboring under dropsy of the abdomen and lower extremities. The kidneys were deficient in action, but the urine secreted was not albuminous; the bow-

els were constipated, consequent upon deranged hepatic functions. She had been living for more than a year in a very malarious district, some four miles from the city of Brooklyn, and all her children had there contracted intermittent fever. She presented the peculiar appearance of one resident in such an atmosphere, but had not suffered from febrile disorder. In the course of my attendance, I had to tap her upwards of six times, drawing off at the first operation about twenty-eight pints of a highly albuminous fluid. The medical treatment was directed to improve the condition of the liver and kidneys, without, however, much benefit. Only within the last ten days had she become jaundiced; but bilious vomiting was of frequent occurrence during the last month of her existence; still, she had long presented signs of gastric derangement, as nausea, eructations, red and glassy tongue, &c.

Autopsy.—Body emaciated, and deeply jaundiced; abdomen and lower limbs dropsical; peritoneum presented traces of inflammation; small intestines generally congested; liver much enlarged, indurated, and of a lighter color than usual; spleen somewhat enlarged. The pancreas was indurated, and thought to be scirrhus throughout, the thickening and hardening extending up along the common duct, and involving the tissues surrounding the gland, and the portal vessels. The kidneys were enlarged and congested; thoracic viscera healthy.

Dr. Clark remarked that, though the pancreas was enlarged and hardened, yet the disease was not malignant scirrhus. All the natural tissues of the pancreas can be found. It seemed rather a variety of hardening, and is worthy of exhibition as an additional illustration of the variety of true malignant disease in this situation. He did not remember to have seen a case where scirrhus began in the pancreas, though such cases are on record; he believed that the change in the specimen under consideration was often mistaken for malignant disease. The dropsy was probably the mechanical result of the constriction of the portal vessels by the enlargement of the pancreas. The kidneys are large, but have not undergone any of the changes of Bright's disease. The stomach shows some of the little prominences spoken of as polypi; it would not be difficult to suppose these growths were malignant, if the pancreas had undergone a similar change. They are made up of ducts, vessels, and fibrous tissue, and nothing else, so far as he had examined them. The ducts are similar to those noticed in the stomach, and all communicate with a single tube; this tube penetrates the whole depth of the fibrous mass, which would seem to be little more than a gland, accessory to the performance of the functions of the stomach. *Nov. 9th*, 1853.

Syphilitic Vegetations.—These were removed from the vulva of a female. A careful examination of their microscopical structure showed them to be chiefly epithelial, of the variety usually found in the vagina. The cells are so closely packed as to resemble fibres, but they are distinguishable on close inspection. Besides these cells, there are a few free cells of small size, appearing to be nuclei. They contain a small amount of fibrous structure, and a few blood-vessels. *Dec. 28th*, 1853.

Specimens and Cases. By J. T. METCALFE, M.D., Physician to Bellevue Hospital.

Retention of a dead Fœtus, four Months in the Uterus.—Dr. Metcalfe presented a small fœtus, supposed to have died at the third month. It was passed by a lady who had several children, and one previous miscarriage; she was very healthy and well-formed. She became pregnant about the first of last June, and progressed favorably nearly four months. Somewhere between the third and fourth month, her husband was taken suddenly ill, and she was very anxious on his account. She noticed that, for two weeks after this, the size of the abdomen continued to increase; but after that time it did not increase, but began to diminish, and continued diminishing, until she regained her natural size, and she concluded that she had been mistaken. The only change from her normal condition, which she had observed, was the cessation of the menses, and this swelling of the abdomen and its subsidence. There was no discharge from the vagina of any kind. Six weeks ago, he was called to visit her, as she had passed something while urinating; it came away without pain or premonition; she merely felt something in the vagina and removed it. On examination it appeared to be a very small fœtus, with an umbilical cord six inches long. The head bore a striking resemblance to a duck's head; the occiput and brain were in a tolerably fair state of preservation. She noticed, at the time of its expulsion, an offensive discharge from the vagina, and in a short time the placenta and a putrid mass were discharged. The next day she was perfectly well, with the exception of a slightly offensive discharge, for which she used a solution of chloride of soda. She continued well for four days; at the end of the fifth day she had some hæmorrhage, which required no treatment, except rest. The case was interesting, from the fact, that the dead fœtus was retained four months in the uterus without producing any sensation whatever, or any influence on the general health; that during this time, there was a collection of fetid fluid in the uterus, that the abdo-

men diminished, and that hæmorrhage came on so long after the expulsion of the fœtus. The expulsion of a fœtus, under these circumstances, seems generally not to be followed by hæmorrhage, though it it is frequently followed by a little offensive discharge. The lapse of time occurring between the death of the child and its expulsion seems to be very variable. He knew one instance where eight years had elapsed between the two periods. He supposed that after death it was partially absorbed; the anterior part of the belly, in this instance, was absent. *April* 13*th*, 1833.

Aortic Disease.—The patient was a German laborer, 65 years of age, of temperate habits, but subject to rheumatism and debility, attended by a slight cough. Dr. M. found him in his service, and understood that he was suffering from chronic bronchitis; and as he was reported to be improving, he made no examination of his chest. The house-physician, however, examined him repeatedly, not being willing to attribute his sufferings to bronchitis alone. But physical examination threw no light upon the case; the patient never complained of any symptoms which might lead to the suspicion of aneurism. On the 31st of May, he was suddenly seized with hæmatemesis, and vomited about two quarts of blood within six or eight hours, when death occurred. On examination, all the organs were found healthy, with the exception of the aorta. The heart was in every respect normal. An aneurism about the size of a hen's egg rested upon the vertebræ, and had caused their absorption.

Ulceration and Perforation of the Ileum.—The patient, an American, 23 years of age, was admitted on the 25th inst., into Bellevue Hospital, in a moribund condition, and died within 10 hours afterwards. His habits were intemperate, and he had been ill for several weeks, suffering much from pain in the abdomen, and lately with diarrhœa. Although nearly comatose, on admission he showed signs of pain when pressure was made on the abdomen. On making the autopsy, the ileum was found to be ulcerated and perforated. The ulceration commenced about six inches above the ilio-cæcal valve, and the bowels were agglutinated together in the neighborhood. Peritonitis was general without suppuration, and some feculent matter had escaped into the peritoneal cavity. The ulcers resemble those met with in dysentery, their general direction being transverse.

Prof. Swett considered these ulcerations, if not the result of tuberculosis, extremely interesting. He remembered a patient having a slight diarrhœa, and not thought to be dangerous, suddenly attacked with a tremendous hæmorrhage from the bowels, of which he died in

two hours. A post mortem examination discovered several ulcers in the ileum near its termination, one of which had perforated a vessel of considerable size. The ulcers were no larger than peas, and had no connection with any typhoid fever. *June 9th*, 1853.

Specimens and Cases. By HENRY G. COX, M.D., Physician to the Emigrant State Hospital.

Pericarditis in an Infant.—Dr. Cox presented the heart of a child 11 days old, who died with pericarditis, and the ovaries of a child 13 days old. The first child was apparently healthy at birth, but on the fourth day had a convulsion, with labored respiration, skin becoming alternately livid and clear, and nursing only occasionally. There was an indistinctness of the sounds of the heart, but nothing else abnormal was observed. On post mortem examination, the pericardium was found to be filled with serous fluid. In upwards of fifty post mortem examinations of children of about this age, he had never before observed appearances of pericarditis. The general symptoms might have been due equally to imperfect closure of the foramen ovale, or deficient aeration of the blood.

Ovarian Dropsy in an Infant.—The child from whom the ovaries were taken, was healthy and well nourished, had a healthy mother, and nursed regularly; convulsions occurring at intervals, was the first unfavorable symptom. The bowels acted well, every organ seemed to be in its normal condition, yet it died on the second day after the occurrence of the first symptoms. On examination, all the organs were found healthy, except the uterus and the ovaries; the former was dilated, and the os was as large as that of a child ten or twelve years of age; the latter were dropsical, the fluid being clear and transparent.

Dr. Elliott stated that he had made the post mortem examination of a child, at the Lying-in-Asylum, which died 36 hours after birth, and had the symptoms of cyanosis, though not perfectly well marked. Dr. Isaacs and Metcalfe were present at the autopsy, and recognized the appearance of well marked endocardial inflammation. The septum auricalare was distinctly thickened and gritty to the feel, and the foramen ovale was patulous. *May 11th*, 1853.

Enlarged Spleen of an Infant, following Intermittent Fever.—Dr. Cox exhibited the enlarged spleen of an infant five weeks old. Two weeks before confinement, its mother had suffered from intermittent fever, which disappeared before labor, and returned again a week after her confinement. When four weeks old, the child had an attack of

intermittent fever; the cold stage was short, but the hot stage lasted eight hours. Quinine was given to both mother and child, the latter taking three-fourths of a grain every three hours. During the following week the child had two convulsions, for which iodide of potassium was given; but it sank and died. On examination the lungs and heart were found healthy; liver congested; spleen enlarged.

Dr. Cox remarked that during the present year he had seen 17 cases of intermittent fever, occurring in children from five weeks to three months old.

Hydrocephalus Internus.—The patient was a female infant, aged 18 months, of German parentage. The mother stated that it was her tenth child, and was well until it reached the 16th week, when it became restless and feverish, and the head began to increase in size, and in eight weeks it became nearly as large as when admitted into the Hospital. It never had convulsions, and passed through the period of dentition without inconvenience, excepting a little diarrhœa. One of her children had died of convulsions, the remainder were still living. Her father and mother died of apoplexy, at the respective ages of 65 and 56. The father of the child is in good health. The treatment consisted of generous diet, and the iodide of potassium with tonics. The patient continued to decline, and died eight days after admission, without convulsions or any other symptoms.

On post mortem examination the anterior fontanelle was found unclosed, and the sagittal sutures unossified. The vessels of the brain were congested, and some of the cerebral convolutions nearly obliterated. The hemispheres separated from the weight of the fluid, which gave exit to 20 ounces of limpid serum from the lateral ventricles. The hemispheres were distended like two sacs, their walls at some points being not more than one-eighth and at others one-sixteenth of an inch in thickness. There were no floculi in the fluid; the lining membrane of the ventricle was thickened; no granulations or roughness was found about the corpora striata or elsewhere; the choroid plexus was not anæmic. There were no tubercles in the lungs, liver, spleen, or kidneys, nor were the mesenteric glands enlarged. A circumscribed point of pneumonia existed in the lower lobe of the right lung; it was in the second stage. *Oct. 26th*, 1853.

Specimens and Cases. By Lewis A. Sayre, M.D., Surgeon to Bellevue Hospital.

Cancer of the Stomach.—The person from whom the specimen was obtained, was originally a Canadian, a very robust, energetic, enter-

prising man, who had always enjoyed good health, until about six months since, when he met with some severe losses, after which he became melancholy. He had slight dyspepsia, but was not treated for it until he began to emaciate, and even then there were no symptoms present which led to a suspicion of his disease. He never vomited from first to last. He became more and more reduced until he was little else than a skeleton; still he was supposed to be suffering from phthisis. He went to a Hydropathic Institute in this condition, where he first came under observation, then in a dying condition. On placing his hand upon the region of the stomach, Dr. S. discovered a tumor which he decided to be cancer. On post mortem examination two or three quarts of serous fluid were found in the abdomen; the peritoneal surface was completely covered with little tuberculous masses, some of which were as large as a pea. The stomach and pancreas were agglutinated into one solid cancerous mass; the pancreas had well nigh the hardness of stone. The intestines were matted together and thickened; the colon was not larger than the thumb.

Resuscitation of an Asphyxiated Infant.—Dr. Sayre narrated a case illustrating the beneficial effects of artificial respiration in the management of asphyxiated new-born infants. The child in this instance was born at half past twelve o'clock. By passing a tenaculum through the tongue and drawing it out, he succeeded in passing a male catheter into the larynx, and by ten minutes to three, respiration was established, and the cord from which no blood had as yet escaped, was ligated. The child lived three days and died in convulsions. *April 13th*, 1853.

Cancer of the Stomach.—Mr. Doyle, æt. 35, originally of good constitution, active and robust, of regular habits, but latterly dissipated, and liable to commit great excesses in diet, which caused great enlargement of the abdomen, was suffering, when first brought under observation, from dyspeptic symptoms. These had already continued eighteen months, for which he took different remedies. His health continued to decline, and four months since he was obliged to give up work; he could not retain any thing on his stomach, and in consequence became greatly emaciated, pulse feeble in the left wrist and absent in the right, and there was a strange appearance of venous congestion on one side of the trunk. A tumor could be felt above, and to the right of the navel. The diagnosis was scirrhus of the stomach. He died three weeks afterwards, and an autopsy was made 10 hours after death. The whole trunk, both lower extremities, and the right arm presented externally much congestion, and many points of extra-

vasation. The small intestines were perfectly empty and dwindled to the size of the finger, and the colon was but little larger. The patient had not had an evacuation of his bowels for three weeks, and had vomited incessantly until within nine hours of his death. The liver, kidneys, and spleen, were entirely healthy. The stomach was distended with about a quart of fluid which had probably accumulated during the last hours of life. The inferior portion of the stomach and the pyloric orifice were the seat of cancer, so constricting the opening as to render the passage even of liquids difficult. The man's father, mother, and two sisters had died of phthisis, but the lungs were healthy; the heart was very small. *May 11th*, 1853.

Specimens and Cases. By A. C. Post, M.D., Professor of Surgery in the University of New York.

Enchondroma.—Professor Post presented a specimen of enchondroma, removed from the palmar surface of the right thumb. The disease was of 25 years duration, and had been once removed, but had now returned. It consisted of two portions which were movable upon each other. The bone was originally firmly attached, but had been rendered movable by a blow from a stick of wood. The integuments were not adherent, and the operation required some nice dissection. The tumor was found adherent to the flexor tendons. He remarked that the disease had not been wholly extirpated in the first operation, and with all his care, some roughness still remained, which might serve as a nidus for a fresh growth.

Hysterical Paralysis.—Professor Post narrated the case of a lady, about 50 years of age, who was the subject of hysterical paralysis. She was affected with hysteria in her youth, and in some paroxysms gave evidence of extraordinary force. Lately, a little grandchild, having strayed away, one of these attacks came on, which, on its subsidence, has left her completely paralysed. She has no command of either extremity, but is able to move her head and neck. Sensibility remains perfect. She suffered much pain in the spine, which could be temporarily allayed by anodynes. *Sept. 14th*, 1853.

Tumor of the Lymphatic Glands of the Neck.—This tumor was removed from a boy 5 years of age, which involved the glands of the right side of the neck. It extended from the base of the jaw to the clavicle, and was situated below the sterno-cleido-mastoid muscle, and the deep facia, lying upon the internal jugular vein. During the operation the sheath of this vessel was laid bare for several inches, demanding a long and tedious dissection. The patient was kept under

the influence of ether during the operation which lasted nearly two hours. He was much exhausted when he came out of the anæsthetic state; much of this was due to the unfavorable condition of the patient, who had eaten heartily before the operation. He vomited incessantly for 24 hours, when an enema was administered and he rallied. He has now a fair chance of recovery. Prof. P. regarded vomiting as an unfavorable symptom; the patient ate before the operation, contrary to his directions; he always instructs a patient to refrain from eating before the operation.

Mollities Ossium.—Prof. Post related the case of a man, 30 years of age, who, when a boy four to six years old, had necrosis of the thigh, followed by necrosis of one of the bones of the left arm, from which he recovered after a term of years. A few days since he was attacked with severe pain in the same arm, which swelled and became livid. He found him moribund, the arm being greatly swelled and painful; there was evident solution of continuity of the bone, and a false point of motion. On making an autopsy, the bone was found separated, but there were no marks of violence; it was simply an instance of mollities ossium, and turning in bed might have caused the lesion. *Sept. 28th*, 1853.

Specimens and Cases. By John O. Stone, M.D., Surgeon to Bellevue Hospital.

Rupture of the Heart.—Dr. Stone presented the heart, uterus, and right ovary of a woman, aged 53, who had died suddenly in Bellevue Hospital. He had not been able to obtain a complete history of the case, but mentioned that she had suffered severely from lancinating pains down the back, thighs, and right side. The right iliac fossa was the seat of a well marked tumor, while the left was fuller than natural; the right side was also exquisitely sensitive. There was also difficulty in urinating and a fetid sanious discharge from the vagina. She retired one evening in as comfortable a condition as usual, and was found dead in her bed, in the morning, having risen during the night. On examination, an abnormal opening was found existing in the right ventricle of the heart, and a large amount of fluid effused into the pericardium. The inability to urinate arose from the pressure upon the urethra of the distended uterus and the tumor which had been detected during life; this tumor was the transformed right ovary; a portion of it seeming to fluctuate was laid open and gave exit to a tea-cup full of grumous fluid and matter resembling encephaloid. The uterine walls contained cavities filled with grumous blood, and the os was the seat of cancerous degeneration.

Cancer of the Breast.—Mrs. J. T., aged 44, married, mother of two children, was admitted to Bellevue Hospital, August, 18th, 1853. About three years ago, a small tumor appeared in the left breast, which continued to increase in size until the 15th of April, 1852, when it was removed, having attained the size of a hen's egg. The parts healed by the first intention and the neighboring tissues, remained in a sound healthy condition until the first of June, 1853, when a small well defined tumor appeared in the same situation as before. This speedily took on inflammatory action, and ulcerated; a fungus shot up, and rapidly increased in size, assuming its present appearance in magnitude and shape. For the past few months it has been stationary, discharging a sanious fetid pus. On the evening of the 16th of October, 1853, the patient arose from her bed and seated herself upon the floor; her attention was soon after arrested by the appearance of blood flowing upon the floor. On placing her in bed and removing the dressings, it was found that a branch of the mammary artery had given away, and was the source of the hæmorrhage. The flow was arrested by pressure and the external use of tannic acid, and did not again recur. The patient was very weak, and the pulse at the wrist hardly perceptible; she however rallied during the night under the use of stimulants. Since that time she has remained in an exhausted condition, and has been sustained by internal stimulants. She died Oct. 25th.

On examination the tumor was found attached to the sternum, and through this to the lungs, so that they could not be separated without considerable force, and were therefore removed adherent. The pericardium contained about a pint of serum. The other organs, viz., the liver, stomach, uterus, and intestines were found in their normal condition, with the single exception of a small patch at the pyloric orifice of the stomach, about as large as a quarter of a dollar. The tumor was not particularly examined at the time. *Oct. 26th*, 1853.

Specimens and Cases. By W. Parker, M.D., Prof. of Surgery in the College of Physicians and Surgeons.

Tuberculous Kidney.—The person from whom this specimen was taken, died at Bellevue Hospital, on the 18th inst. He was 40 years of age, intemperate, of an originally good constitution; last autumn had an attack of epididymitis. In March last he came to the Hospital, suffering from gonorrhœa and inflamed testicle, of which he soon got better, and left. He soon after returned with febrile symptoms and well-marked epididymitis; he had no pain about the loins; there was some difficulty in passing water and considerable irritation and inflam-

mation about the genital and urinary organs. This latter increased, suppuration ensued, and he finally sunk and died. Autopsy revealed this condition of the kidney with ulceration of the bladder, and some disease of the prostrate gland. On laying open the kidney it was found to be the seat of most extensive tuberculous deposit. The disorganization had proceeded to an extent rarely observed, and yet no symptom of the disease had attracted attention during life.

Cancerous Deposit around the Vena Cava Ascendens.—The man from whom this specimen was obtained was 28 years of age. Two years ago he had a fall which resulted in injury to his left testicle, which soon after began to enlarge, but without pain, and without any material effect upon his general health. In July, he sought advice, but the nature of the disease was obscure; the enlargement was attributed to a hydrocele and an exploratory puncture made which proved the diagnosis incorrect. The patient being dissatisfied, applied to irregular practitioners, who attributed the difficulty to bad treatment. He, however, obtained no benefit from their remedies, and the testicle was removed. He was afterwards able to walk about, but continued to emaciate and complain of neuralgic pains, for which strychnine and morphine were administered in large quantities. Dr. P. was called to see him six weeks ago, and found him in tetanic spasms from the medication. These symptoms subsided, and he lived until six days since. A tumor had been detected in the left iliac region, which from its rapid growth and the general symptoms, Dr. P. had diagnosticated to be cancerous. On making the autopsy all the organs were found healthy, but behind the left kidney, and pushing it forward and upward, was the enlarged and diseased vena cava. The tumor which embraced it was encephaloid, and attached rather firmly to the spine; it also entirely surrounded the emulgent vein and artery of the kidney. The kidney was healthy. The urine was examined during the last six weeks and found to deposit uric acid and urate of ammonia.

Cancerous Mammæ.—Prof. Parker exhibited two breasts, which he had recently removed. The first was from a lady, 27 years of age, unmarried, who, after exposure to cold, suffered from pain in her breast. This symptom subsided, but the organ continued to grow rapidly. Her general health remained good. The breast was removed, and on examination, under the microscope, the tumor was found to be cancerous.

The *second* specimen was taken from a married lady, the mother of six children, with no hereditary tendency to disease. Since the birth

of her first child, sixteen years ago, this breast has troubled her, being hard, and preventing her nursing her other children; lately it has grown rapidly. In the belief that it was cancerous, he advised its removal, which was consented to, and the operation accordingly performed. It was the most bloody operation of the kind that he ever performed, it being necessary to secure sixteen arteries. The patient has since done well. Dr. Parker remarked at some length upon the uncertainty of the rules for the removal of these tumors. He believed that many of these chronically enlarged breasts, being in a state of indolent inflammatory action, served as a nidus for the development of true cancer at variable periods of their duration. He referred to a case where this state of things had lasted twenty years; some time since, he advised the patient to let it alone, but more recently noticed a change in the character of the tumor, which led him to advise its extirpation. After its removal, it was found to be unequivocally cancerous; there has been no unfavorable symptom follow the operation. He believed an hereditary tendency to cancer would have developed a further train of symptoms. He referred to the lip as a site where tumors of this kind were often situated.

ART. VII.—*A Case of Fourteen successive Miscarriages, terminating in Chorea and Death.* By F. M. GANETT, M.D., Pitt County, N. C.

MRS. B——, had enjoyed excellent health previous to her marriage, and during her first pregnancy, up to the fifth month, when she miscarried without any dangerous symptoms. She became pregnant a second time, and at fifth month miscarried again. In nine years from her marriage, she had fourteen miscarriages without ever having been delivered of a living child. The first six took place at the fifth month of her pregnancy, and in those that followed the intervals continued to diminish, the fourteenth being only three months. All the presentations were footling, but one, in which the vertex presented. About a week previously to the abortion in each case, the patient began to complain of bad feelings, pains in different portions of the system, languor, etc. Other than this her health was unimpaired. There was no uterine disease, that I could find out; there was no leucorrhœa, or discharge of any kind, and the menses returned regularly. Previously to her ninth abortion, no symptoms presented themselves differing from those of an ordinary labor. Chorea then developed itself so strongly marked, as to prevent locomotion to any extent. Her powers of conception re-

mained unimpaired, and except the chorea which lasted until death; no other symptoms of disease presented themselves. The fœtuses from this time presented appearances of having been dead longer than those previously delivered, and the last one was putrid. Soon after the birth of the last fœtus, an attack of epilepsy occurred, and this came on at irregular intervals until her decease. For two weeks before the last confinement, she complained of severe pain in the head, which ceased entirely after the epileptic attack. Indeed, she remained in a state of stupor after the first attack. Her death took place three weeks after the last miscarriage. She complained previous to her death of pain in the epigastrium, and frequently scratched the part. A dark spot appeared at the seat of pain, but of what character I could not ascertain. The lochia never appeared after any of the abortions.

A number of deductions might be made, as regards the cause of the abortions. My own opinion is, that the cause lay in the nervous system. The subsequent attacks of chorea and epilepsy, seem to favor this view of the case.

ART. VIII.—*Malignant Pustule.* By E. D. AYRES, M.D., East Creek, N. Y. (Communicated in a letter to the Editors.)

THE description of "*A peculiar form of Malignant Inflammation of the Lips and Face, resembling Malignant Pustule,*" by Prof. PARKER, in the May number of your Journal, attracted my attention, from the close analogy borne by some of the cases therein described, to an affection which I have several times encountered within the last year. As the description given by Prof. Parker is so applicable to the disease as I have met it, the difference in the treatment, and the fatality of the disease, are the only objects of this communication.

The *first case* that I saw, occurred in the practice of a neighboring physician, and from its malignant type, alarmed his friends, and counsel was desired. I was sent for, and arrived in the evening of the 10th of September last. I found the patient, Mr. B——n, 31 years of age, a farmer, of temperate habits and good constitution, with the inferior lip greatly swollen, everted, and of a livid hue, the lividity extending to the mouth and fauces, and the tumefaction to the upper lip, and downwards to the pomum Adami. The tongue was moist; there was considerable dyspnœa, and difficulty of deglutition. The pulse was rapid, but small and fluttering; and the patient had been greatly alarmed, but on the subsidence of the pain had become composed. The attending physician was not present, but from the urgency of the

case, I was induced to lay freely open the tumefied lip, and ordered yeast poultice to be applied. I followed this immediately with hot brandy toddy, which was directed to be continued with a powder of two grains of quinine, and four grains of carb. ammonia, given once every two hours, and calomel, two grains, every four hours. The affection had made its appearance in the form of a pustule, some three days previously, and, as in Prof. Parker's first case, was situated just below the vermilion border. It was attended with a burning, smarting sensation, which, as the livid, tumefied areola made its appearance, changed to a steady, intense pain. It was now a hard tumor, without pain, and almost insensible to the touch, resembling at once, erysipelas and carbuncle, and differing essentially from both. The treatment as above directed, was continued thirty-six hours, with decided benefit, the patient evidently gaining strength. There was now added a few grains of the pulv. Doveri to the calomel, as somewhat severe catharsis had supervened.

This treatment was continued twelve hours longer, when slight ptyalism being apparent, it was suspended, as also the brandy. Beef tea, nourishing broths, the quinine and ammonia, were administered for twenty-four hours longer, when the patient was considered beyond danger. He rapidly recovered on nourishing diet.

The *second case*, Mr. C——r, by occupation a carpenter, 35 years of age, temperate, had previously enjoyed good health, was attacked with symptoms similar to the first case. The dyspnœa and dysphagia were not so prominent, and the pustule had made its appearance below the angle of the mouth, on the right side. The tumefaction confined itself, principally, to that side of the face and throat. The period of incubation was longer, the pustule having made its appearance some five days before the occurrence of alarming symptoms. The pulse was 64 and small, and the tendency to death by asthenia, marked. This case was treated like the first, but rather more vigorously; he took three grains of quinine and six of carb. ammonia, every two hours, for the first twenty-four hours. The alarming symptoms subsided in 72 hours, and he resumed his labor in eight days from the time of the first attack of distressing symptoms, and has since remained in good health.

I have seen, during the past winter and spring, three other cases, exactly similar to the above, and have heard of several deaths occurring in the practice of neighboring physicians, from a disease bearing the same description, and doubtless, the same disease. But in no case can I learn that death followed the early and vigorous application of the tonic, stimulant, and it may be antiseptic plan.

PART SECOND.

CRITICAL ANALYSIS.

ART. IX.—*The Diseases of the Rectum.* By RICHARD QUAIN, F.R.S., Professor of Clinical Surgery in University College; Surgeon to University College Hospital. London, 1854. Crown 8vo., pp. 285, with 4 plates.

A Treatise on the Diseases, Injuries, and Malformations of the Rectum and Anus. By T. J. ASHTON, Surgeon to the Blenheim Dispensary, Fellow of the Royal Medical and Chirurgical Society of London, &c, &c. London, 1854. 8vo., pp. 356.

Observations on the Diseases of the Rectum. By T. B. CURLING, F.R.S., Surgeon to and Lecturer on Surgery at the London Hospital, &c., &c. London, 1851, 8vo., pp. 123.

On the Diseases of the Rectum. By JAMES SYME, F.R.S.E., Professor of Clinical Surgery in the University of Edinburgh, &c., &c. Edinburgh. 3d ed., 8vo., pp. 138.

MR. COPELAND published his *Observations on the Principal Diseases of the Rectum* in 1814; Mr. Calvert, *on Hemorrhoids, Strictures, and other Diseases of the Rectum*, in 1824; Mr. Howship, his *Practical Observations, &c., &c.*, on the most important *Diseases of the Lower Intestines and Anus*, in 1824; Mr. Salmon, *on Stricture of the Rectum*, in 1828; Mr. Herbert Mayo, his *Observations on the Injuries and Diseases of the Rectum*, in 1833; but it was reserved to Dr. Bushe, of New York, in 1837, the date of Mr. Syme's first edition, to furnish us with the most complete treatise before or since published on the *Malformations, Injuries, and Diseases of the Rectum and Anus.* The volumes at the head of our article, are the most recent productions of the British press, and the names of their authors, especially of Messrs. Quain, Syme and Curling, are quite familiar to the American Surgeon. The works of Messrs. Quain and

Ashton being of the most recent date, will principally engage our attention. Mr. Quain's treatise is founded on a series of Clinical Lectures, and he has retained the colloquial, or personal form, which the language in oral addresses naturally assumes. His arrangement is such that the histories of cases exhibiting the most important of the phases of each disease precede the general commentary upon it. He remarks:

The object we have now in view being not the study of the natural history of disease, but the history of patients, their ailments, and their cure, the classification of the subjects of these lectures, beyond the grouping together those that present obvious affinities—is unimportant. I shall, therefore, proceed at once to the individual diseases, and first to one most frequently met with.

This disease is hemorrhoids, or piles. Although it seldom affects the young, it is remarkable, says Mr. Quain, that few persons attain to maturity without suffering from it more or less. Abdominal tumors, and pregnancy in the female, may give rise to the affection, but in far the greater number there is no appreciable internal organic change. An indolent life, a full diet, a torpid skin, and constipated bowels are sufficient to explain both congestions of the alimentary canal and of the head. A frequent resort to aperient medicines in time creates a habit, as difficult to be got rid of as any other habit. In practice, the plan of management, dietetic and medicinal, must be stated in detail.

Remember, that as much of the illness which is suffered is induced by the common things with which we are all constantly surrounded and influenced, so the relief and prevention of the evil is, in a great measure, to be obtained by the direction and control of these. Common things must be carefully attended to by the practitioner; things that are not common will command attention.

Although not often observed till after the age of puberty, Mr. Ashton had under his care, at the Blenheim Dispensary, a child two years of age, suffering from external piles, (p. 101). As to the comparative frequency in the two sexes, Messrs. Syme and Curling agree with Dr. Bushe, that they are more common in males; the urinary and genital disorders of the latter, combined with freer habits of living, more than counterbalancing the influence of pregnancy in the female. Dr. Bushe supposed that sanguineous repletion in the female is sufficiently relieved by the menstrual function, and Mr. Ashton states that in the majority of the cases of hemorrhoids occurring in females that have come under his observation, the catamenia have either been suppressed, or the function more or less deranged, though in some cases, he admits, this may have been rather an effect than a cause. At

the turn of life, observes Mr. Ashton, plethoric females are very liable to be subjects of hemorrhoids, and, in some instances, these discharges alternate with each other for some time before the uterine functions entirely subside.

In an interesting paper by Mr. Brown, on some diseases of the Rectum in women, *resulting from certain conditions of the uterus*, (*Lond. Med. Times and Gazette*, March, 1854, pp. 232,) he remarks:

All authors, however, notice that diseases of the rectum are more common in females than in males. I propose to inquire into the cause of this statistical fact, and shall endeavor to show that it is attributable to a uterine origin, and that the female rectum may suffer either from mechanical interference with its functions, from the pressure of an enlarged uterus, or from derangement of the circulation in that organ, inducing a corresponding disturbance in the circulation of the rectum.

He then proceeds to illustrate, by diagrams, how these abnormal conditions may give rise to hemorrhoids; but, after the opinions above quoted, of Dr. Bushe, Messrs. Curling, Syme, and Ashton, we confess that we are at a loss to know what value is to be attached to Mr. Brown's "statistical fact" as regards the comparative frequency of this affection in the two sexes.

A diversity of opinion prevails among surgical writers, as to the structure of hemorrhoids. To facilitate our comprehension of this matter, Mr. Quain enters into an examination of the natural disposition of the blood-vessels with which the rectum is so liberally supplied. His remarks are illustrated by plates showing how the arteries in the lower part of the bowel all join by transverse branches of good size, whilst the veins form loops, and freely communicate with each other. Mr. Curling likewise dwells upon the peculiar arrangement by which the veins form a plexus, for it is in these that the alteration constituting the hemorrhoidal tumor takes place. Mr. Quain observes:

At an early stage, dilatation occurs, which in one part is gradual, fusiform, (*plate* 2); in another it is abrupt, starting suddenly out of the end of the loop into a rounded pouch. A degree of elongation of the looped part accompanies these changes, so that the vessel is lowered beyond its natural level (*plate* 2). During these alterations, the dilated vein still circulates fluid blood. In a more advanced stage the dilatations are still further enlarged, and they are found to contain clotted blood, or fibrinous matter. From the aggregation of veins thus dilated in different ways and in different degrees, loaded also with blood, or one of its elements, more or less solidified, the hemorrhoidal tumor is formed.

The anatominal structure of these tumors has a very important bearing on the therapeutical measures which may be adopted. The

fact that we are dealing with veins, morbidly enlarged, may explain the occurrence of pyemia, which has proved fatal after the operations performed for their removal.

There can be no question that, in the language of Dionis, "*nous payons bien cher*" for the liberal supply of blood distributed to the rectum, and among the unpleasant consequences thus resulting, those produced by hæmorrhoids rank not the least. Judging from the remarks of the distinguished surgeon to whom we have above referred, a century since it was not "*dans le pouvoir de la Médecine et de la Chirurgie de les guerir radicalement*," (*Cours des Operations, etc.*, 1746, p. 401,) and in these tumors, palliative measures only were recommended. Indeed, with the views entertained by the ancients, it was considered hazardous to attempt a radical cure. But what are the opinions of modern surgeons, as to the propriety of effecting radical cures in cases complicated with other diseases? Let us hear Mr. Quain on the subject:

From the oldest times, it has been a common belief, if not a medi, cal dogma, that losses of blood, under the circumstances just indicated are salutary; that, at all events, they prevent matters from getting worse as regards the disorders we suppose to exist elsewhere, and ought not to be arrested. For all such impressions or traditions in the profession, there is, we are inclined to believe, some reasonable foundation; and yet we ought not, in a matter of such great importance, to be guided merely by impressions, however generally they may be entertained. I apprehend that the opinion entertained, respecting the healthful influence of fluxes of blood, arose, and continued to be strongly held, when the abstraction of blood was largely used as a remedy for actual disease. . . . . May it not be, then, that notions which have come down to us from a period when the large abstraction of blood was considered necessary, should require revision, when the opinion and practice in this respect have been much modified?

He then relates the case of a lady who, with bleeding hemorrhoids, had symptoms of pulmonary disease; yet, as she suffered so much from the pain and frequent recurrence of the bleeding, she submitted to their removal by an eminent surgeon in London. In three years from this period, this lady died of phthisis. At first view, this case may be regarded as settling the question as to the propriety of operating under similar circumstances, but we are disposed to coincide with the views of Mr. Quain, that merely with such a statement of facts we cannot draw any inference from the case.

All the circumstances intermediate to the surgeon's operation, and the active development of phthisis, are wanting. Moreover, we do not know, from any well-observed examples, that the loss of blood will pre-

vent the active growth of tubercular disease, any more than it would cure it, or influence it beneficially in any stage of its progress.

On the other hand, is it not a fact incontestible, that whatever debilitates promotes the progress of tubercular disease? Have we not the testimony of Sir Benjamin Brodie, MM. Velpeau and Nelaton, that erroneous opinions have been entertained about the propriety of amputating in cases of arthritic disease, the supposed safety valve in tubercular disease of the lungs? Again, the practice of Dupuytren and Dr. Souberbielle, according to the "*Manière nouvelle de prat. l'Opération de la Pierre*," by Sanson and Begin, and the "*Traité de la Cystotomie*," by Belmas, furnishes us with abundant proof that the removal of the stone, even where there is every indication of tubercular disease of the lungs, "*peut arrêté les progrès de ces affections et guéri les malades.*"

True, Dr. Copland states that he has seen three cases in which fever, melancholia, and apoplexy have followed the arrest of the hemorrhoidal discharge, and Mr. Howship mentions the case of a gentleman subject to gout, who, soon after the arrest of the discharge by strong vitriolic lotions, died of gout in the stomach. A few years since, we removed hemorrhoidal tumors from a patient who some months previously had had an apoplectic attack, and this person died from cerebral disease in the course of a year after the operation. But although an habitual discharge may exert a salutary influence in moderating the flow of blood to the head, we doubt whether such can be the case in consumptive patients, when it is permitted to continue until it produces the waxy look, the bloodless lips, and defective energy, &c., &c., which is so often observed in such cases.

Mr. Syme, in referring to the popular prejudice which exists against interfering with bleeding piles, remarks that the worst consequences thus anticipated are hardly to be dreaded more than those directly sustained from the disease, "and the result of experience is quite opposed to the apprehension of harm being so produced." He relates a case illustrating the safety with which the hæmorrhage may be arrested, even when of the longest standing and greatest extent. In many of these cases, he observes, there is reason to fear that the cause has been mistaken for the effect.

Mr. Curling agrees with Herbert Mayo, that these discharges help to ward off attacks of gout, and prevent fits of apoplexy, for which reason he would avoid the sudden drying up of such discharges as have become natural to the system, and Mr. Ashton is of the opinion that, where there is a predisposition, hereditary or otherwise, to

apoplexy, gout, phthisis, hemoptysis, epistaxis, or other kinds of hæmorrhage, local treatment must be a secondary consideration, and not adopted till the constitutional cause has been removed or palliated.

What is the best, the safest mode of effecting the radical cure of hemorrhoidal tumors? Cauterization, excision, and the ligature have had and still retain their advocates. Dionis, in 1746, recommended the use of the scissors, and Mr. Syme, in 1846, gives the preference to the same instrument in operating on external piles. But, although excision is the quickest and easiest mode of removing internal piles, he admits that it is "very apt to occasion a serious or even fatal hæmorrhage." Sufficient proof of this may be found in the *Leçons Orales*, &c., of Dupuytren, who extensively employed excision even in internal piles; and in the Lectures of Sir Astley Cooper. Mr. Syme very justly remarks, that if other practitioners had been equally candid with Sir Astley, we should, doubtless, have had more testimony as to the danger of this operation. On one occasion where he himself had cut away an internal hemorrhoid, it was necessary to employ manual pressure for several hours to restrain the bleeding. In the *London Med. Gazette*, vol. xv., p. 843, Sir Benjamin Brodie states that he nearly lost two patients under the same circumstances, and, like Sir Astley, he abandoned the practice.

Dr. Bushe came near losing two of his patients after the excision of internal hemorrhoids, and became so much alarmed that he did not again resort to it. Mr. Cline was accustomed to state in his lectures that he removed internal piles by excision, but that "a timid surgeon removes them by ligature." We have tried excision in one case, and, from the troublesome hæmorrhage which followed, we are satisfied to incur the imputation of timidity, which, according to Mr. Cline, applies to such men as the late Sir Astley Cooper, and Mr. Bushe, and to Sir Benjamin Brodie and Prof. Syme.

Is the ligature free from danger? The advocates of excision have attributed to this method, phlebitis, diffuse inflammation of the cellular tissue of the pelvis, peritonitis, tetanus, &c., &c. Mr. Curling states, that no fatal case of the kind has come under his notice, either in public or private practice. Mr. Quain has seen a single instance, and others have been observed by Mr. Copeland and Sir Benjamin Brodie. At a recent discussion of a paper by Mr. Henry Lee, "*On an improved plan of removing hæmorrhoidal tumors*," read before the Medical Society of London, Feb. 11th, 1854, Mr. Henry Smith mentioned a case which had come to his knowledge, in which the patient died of tetanus from the application of the ligature. We think it was some

time during the year 1848, that Mr. Lee published a paper in the *London Medical Gazette*, in which he detailed cases where pus was distinctly traced in the course of the hemorrhoidal veins, and in which secondary abscesses proved fatal, from which Mr. Lee concluded, that it is not always safe to place a ligature upon the enlarged veins of the rectum, especially in the manner in which the operation is usually performed, viz., by passing a needle, armed with a ligature, through the base of the tumor, whereby it must occasionally happen that one of the larger veins of the rectum is transfixed, and its sides held apart by the ligatures tied on the opposite sides of the tumor. To obviate this danger, he proposed the application of the strongest nitric acid that can be procured, to destroy certain portions of the mucous membrane of the rectum, and to coagulate the blood in the veins of the part, so as to effectually seal the vessels against the entrance of any foreign matter. The use of nitric acid in the treatment of hemorrhoids, as is well known, was recommended by Mr. Houston, of Dublin, in his papers published in the Dublin Quarterly Journal of Medical Science, for March, 1843, and September, 1844. The particular form of the disease to which he considered this remedy applicable, was the florid vascular hemorrhoidal tumor. From the remarks of Mr. Lee at the meeting of the London Medical Society, to which we have above referred, it would seem that the nitric acid has been indiscriminately employed in Great Britain, and Mr. Ashton states that several instances have come under his observation, where mischief has arisen by attempting to destroy large growths with the acid; in three instances a communication had been formed between the rectum and vagina by its application in too large a quantity. The acid may be properly applied by means of a small piece of lint wound over the end of an eye-probe, but should not, according to Mr. Lee, be used in those cases where the mucous membrane has undergone an inflammatory thickening, or where, from long exposure, it has lost its villous character. At the above meeting, Messrs. Coulson, Hancock, Rowe, Harrison, Browne, and others who had been pupils of Mr. Copeland, expressed their preference for the ligature. Mr. Quain is disposed to regard the nitric acid with favor: "but, as I do not like changing from what I have long found an effective and safe plan of treatment (the ligature), I have not hitherto used the acid, or any similar application, for the cure of hemorrhoids."

In using ligatures, he would not apply them in large numbers, but would limit himself to two or three double ligatures, believing that it is better to have to return to the application of one or two more, than "to do too much even once in life." It is especially important

to act upon this principle where the patient is in impaired health, or debilitated by loss of blood. Excision he regards as the proper operation in external hemorrhoids, though he has found a lotion of nitrate of silver, twenty grains to the ounce, very much abridge the duration of the attack.*

We cannot dwell on the remarks of our authors under the head of *abscess.* After alluding to the fetid odor belonging to the matter in rectal abscesses, where no communication exists between the intestine and the cavity of the abscess, he admits his inability to account for the fact, and observes that the whole subject stands in need of elucidation.

Having dwelt at such length upon the subject of hemorrhoids, we must be brief in our notice of rectal abscess and fistula in ano. The perusal of the case of "large abscess" near the rectum, detailed at pp. 84, 86, reminds us of that reported by Dr. Sayre in the March number of this Journal. Unlike the latter, however, the case terminated fatally. As to the propriety of operating for fistula in ano in phthisical patients, Mr. Quain thus remarks:

"It has long been a common belief in the profession, that there is a proneness to the formation of fistula among persons laboring under phthisis; but facts recorded by two most accurate observers, (MM. Andral and Louis,) lead irresistibly to the conclusion that this doctrine is erroneous." p. 116. Now at page 118, we find the following: "With respect to further examples of the presence of fistula in persons affected with phthisis, I need only state that in the abstracts of cases, which I have drawn from my hospital books, there is a good number respecting each of which it is narrated that, on account of the existence, more or less, of such symptoms as those detailed in the account of the last case, the operation was declined." This "good number" is, we think, a sufficient admission that the doctrine above alluded to is not, after all, so "erroneous," as the reader would infer from Mr. Quain's former remarks upon this point. Again: "Where the symptoms, then, of tubercular disease are present, the operation for fistula is not allowable. The wound does not heal; the sore is but enlarged, and the surface secreting pus augmented. In short, the operation fails, and, in failing, adds to the evil. I am not, however, disposed to look

* For some very interesting practical remarks, by Dr. John Watson, on the dangers incidental to operations on hemorrhoids, we would refer the reader to the number of this Journal, for July, 1844, p. 26.

upon a former threatening of phthisis as always a bar to the operation, if the health at the time be robust. I have more than once acted upon this view, and have not found reason to regret having done so." p. 119. For some very interesting remarks under this head, we would refer the reader to Mr. Fergusson's Practical Surgery, 3d Lond. Ed., p. 749.

Fistula will sometimes heal readily, even in patients affected with tubercular disease, and this, too, under medical treatment alone. Mr. Ashton speaks of a case of the kind, which was cured by washing the anus with soap and water, night and morning, and also after defecating, and not to allow the bowels to become constipated. p. 238. In this manner, the writer, "a *tuberculous subject*," has, for some three years, kept a fistula in such a condition as to give but very little annoyance. Prolapsus of the rectum, commonly called "prolapsus ani," is a very troublesome affection, especially among children, and, in ordinary cases, according to Mr. Quain, the constitutional state is at fault, "bread and butter" being the principal diet of the patients. Milk he regards as an essential element of the diet, and a little meat should be allowed. The child must be prevented from sitting beyond a very short time, when the evacuations are passed, and, if possible, the faeces should be passed while the child is lying on the back. If the bowel descend during the intervals of the evacuations, the child should be kept in bed, or on a couch. The grey-powder, with castor oil in small doses, combined with the compound cretaceous powder or mixture, and small quantities of opium, constitute the medical treatment pursued by Mr. Quain, and he asserts that he has known but a single instance in which this method has failed. An operation is seldom required in children, but, in the adult, the reverse is the rule. In females, of course, previous to resorting to any operation, inquiries should be carefully instituted to learn whether the prolapsus is owing to any abnormal condition or position of the uterus. The object of the operation is to bring about such a degree of the adhesive process as shall prevent the descent of the gut. The proceeding most generally adopted by Mr. Quain, consists in removing longitudinal folds of the skin, with a little encroachment on the mucous membrane, also, according to the method originally adopted by Dupuytren, and the principles laid down by Mr. Hey. The fold of integument is raised with a pair of forceps constructed for the purpose, and it is then snipped off with a pair of scissors bent on the side. But little dressing is necessary; lint dipped in water, put over the part, is all that is required at first. Afterwards, cleanliness, and an astringent lotion during the healing process. "Caution is required as to the extent of

the integument removed; I allude to the breadth of this. In the natural state, the skin of the anus is in folds, which are necessary to allow the enlargement of the orifice during defecation. In this act, the sphincter muscle is dilated, the skin but unfolded. If, therefore, the latter (the skin) should be too freely removed, there is, afterwards, difficulty in voiding fecal matter when it is formed, or lumpy."

He remarks that he has met with no instance of a return of the prolapsus after this operation, though M. Velpeau has referred to such in his *Leçons orales de clinique chirurgicale*, tom. iii., p. 135. He has succeeded in curing prolapsus by applying ligatures to small pieces of the mucous membrane, as in tying hæmorrhoids. This was the favorite method with Mr. Copeland, and Mr. Ashton considers it the most simple and effectual, and at the same time attended with the least pain.

In cases when, from age, debility, or other circumstances, an operation cannot be performed, the intestine must be supported by pads and a T bandage, or by a truss, like that recommended by Gooch in his "*Cases and Practical Remarks on Surgery*," vol. ii., p. 158.

Upwards of 20 pages are devoted by Mr. Quain to ulcers of the skin and mucous membrane, under which head is included that painful affection known as fissure of the rectum. In the treatment of this, for many years, he was in the habit of resorting to Boyer's operation, viz., division of the sphincter ani; but in performing this on a certain occasion, the patient moved away, the bistoury having divided the mucous membrane and integument only. "It occurred to me at the moment, to ascertain if that slight incision would be enough to relieve the patient. The success was complete, and from that period I have used no other operation in ordinary circumstances." p. 165. In a note he remarks that he had supposed this method originated with himself, but he subsequently found, in a lecture by Sir Benjamin Brodie (*Lond. Med. Gazette*, vol. xvi., 1835), that he had been anticipated by this distinguished surgeon.

We pass over "Painful Contraction of the Sphincter Ani," in the existence of which, as an idiopathic affection, he does not believe; nor can we dwell on "Neuralgia of the Rectum," in which he has found the vapor of chloroform very beneficial.

Thirty-five pages are devoted to "Stricture of the Rectum," a disease of which, there can be no question, is often imaginary, but which may exist. Mr. Quain relates some very instructive cases under this head, showing what infamous quackery his patients have been subjected to by those who call themselves *surgeons!*

In the next place we find discussed "Concentric thickening and ulceration," "Tuberculated disease," and "Cancer of the rectum." Mr. Quain has detailed numerous cases illustrative of the symptoms and progress of the latter disease. As to the propriety of excision in this affection, he remarks that the evidence is to be drawn from foreign surgery; Lisfranc, boasting of curing in this manner six out of nine cases, whilst M. Velpeau is reported to have lost three out of six cases. (*Mem. de l'Acad. Roy. de Med.*, t. 3.) "My opinion is, that if the disease should be strictly limited to a small space in the lower end of the gut, the removal might be effected with a fair prospect of advantage, but that otherwise it is wholly inadmissible." p. 261.

Should complete obstruction occur, of course an artificial opening is the last resource, and, according to Mr. Quain, the left colon in the lumbar region is, "beyond all question," the part to be preferred for that purpose, as the opening may there be made without opening the peritoneum. Those desirous of becoming fully acquainted with the present state of our knowledge on this subject, cannot do better than to consult the valuable paper of Mr. Cæsar Hawkins, in the thirty-fifth volume of the Transactions of the Royal Medical and Chirurgical Society of London, or the elaborate work of Dr. Walshe.

The remaining portion of Mr. Quain's volume is occupied with the consideration of "Spasmodic Contraction of the bowels," "Polypus and Polypoid Growths," and "Foreign Bodies," in the rectum. In addition to these subjects, Mr. Ashton treats of "Malformations of the Rectum and Anus." He refers to a case in which the malformation was not discovered till twelve days after the child was born, in which the rectum was only reached by incisions made to a very great depth. During the past winter, the writer operated in a case in which the difficulty was not detected till 49 days after the child was born, and yet, by passing the knife to a very great depth, fecal matter was reached, and the intestines, for the first time, freely evacuated! At the time we supposed this case to be unparalleled, for we could find no record of an instance in which a child had lived for seven weeks without an evacuation, nor have we yet succeeded in finding the report of any case in which, after so long a period, an operation was successfully performed, But at a Meeting of the *Edinburgh Obstetrical Society*, May 12th. 1847, Dr. Lyell, of Dundee, communicated the particulars of a case in which a child lived upwards of 12 weeks, "*without any fæcal outlet but that of the mouth!*" (*Monthly Journal*, August, 1847, p. 137.) In January, 1854, Mr. Fergusson performed Amussat's operation of opening the descending colon in the left loin, in a case of imperforate

anus. The infant was nine days old at the time, and, at the last reports, was doing well. A report of this case was presented to the *Pathological Society of London*, at its meeting on the 7th February, 1854, and, in the discussion to which it gave rise, Dr. Crisp and Mr. Adams expressed their preference of this method, to pushing a trocar into the rectum from the perineum, but Mr. Ashton remarks, p. 334, "I imagine few English surgeons would propose to adopt the operation of Littrè or Callisen for opening the descending colon, much less that of putting into practice that of Dubois, of opening the sigmoid flexure of the colon, and passing a strong probe through it towards the perineum, by pressure rendering the end prominent, if possible, then cutting down upon it."

Now, in a case like that observed by Dr. Lyell, in which the colon terminated in a *cul de sac*, floating loosely among the other intestines in the umbilical region, there is no alternative but to open the colon in the right groin, and not in the left, as was done by Mr. Fergusson.

But we must bring our remarks to a close. The works placed at the head of this article are all of a truly practical character. The treatise of Mr. Syme has passed into the third edition, although, like that of Mr. Curling, it is of moderate dimensions when compared w th the more recent volumes of Messrs. Quain and Ashton. Mr. Curling is favorably known on this side of the Atlantic, by his excellent contributions on the subject of tetanus and the diseases of the testis, and the student may consult his work with the most implicit confidence in the merits of the author. The work by Mr. Ashton reminds us more of that on the same subject by Dr. Bushe than any that has since appeared. It is the most complete of all the works at present under consideration. Mr. Quain's volume is made up of *Clinical Lectures*, and is most richly illustrated with cases which have been under the care of its distinguished author. Coming from such a source, it cannot fail to receive the approbation of the profession, and its perusal must better qualify the practitioner to undertake the treatment of a class of cases which, when properly understood, may redound greatly to the surgeon's reputation, but which, if misunderstood and mismanaged, cannot fail to bring the latter into discredit, and to inflict unbounded tortures on their unhappy victims.

G. C. B.

ART. X. *An Inquiry into the Pathological Importance of Ulceration of the Os Uteri;* being the Croonian Lectures for the year 1854. By CHARLES WEST, M.D., Fellow of the Royal College of Physicians, Physician-Accoucheur to St. Bartholomew's Hospital, and Physician to the Hospital for Sick Children. London, 1854. (8vo. pp. 95.)

THE fact that the *questio vexata* in uterine pathology was made the theme of the last course of the Croonian Lectures, before the Royal College of Physicians, affords evidence that, notwithstanding all that has of late been said and written upon this subject, the investigations and conclusions in this department of pathological study are as yet neither complete nor satisfactory. That the theme for these lectures was wisely selected as a highly important and practical topic, the learned physicians before whom they were delivered, and all who may peruse them, can bear testimony; for all who have noted the progress of this department of pathology, and have attentively studied the prolific issues from the press on this subject, in England and France, and especially those physicians who have made extended and careful investigations in reference to the nature and relations of uterine diseases, must have felt that there yet remains wide scope for original and highly important study connected with this subject, and that such investigations are urgently demanded.

In the investigation and discussion of the subject of the lectures now before us, the eminent physician-accoucheur of St. Bartholomew fully sustains and confirms his reputation as a faithful and philosophical observer, and a candid and scientific writer—a character so happily illustrated in his excellent treatise on the *Diseases of Children.* Happily conceiving the true method of studying the facts which concern uterine pathology, and omitting all controversy in reference to technicalities, Dr. West at once undertakes the examination of the facts bearing upon the important question that forms the subject of his lectures. He freely admits—and his own investigations even demonstrate, the frequent occurrence of those morbid conditions of the mucous covering of the os and cervix uteri, popularly denominated *ulceration*, but he is not prepared to admit, without better proof than has yet been offered, that this particular lesion is the widely-acting and determining cause of all the Protean forms of the diseases of females. By ingenious and varied arguments, he attempts to exhibit, in their true relation, the train of morbid processes in the more common uterine disorders, at the same time pointing out various errors into

which he conceives that certain popular writers upon inflammation and ulceration of the cervix uteri have fallen.

In the commencement of his remarks upon the ordinary sources of disorder of the womb, Dr. West calls particular attention to the physiological phenomena attendant upon the performance of its highest function, that of reproduction; and he refers to the history of the fibro-cell development, or growth of the uterus during pregnancy, and the subsequent fatty degeneration of the same structure after delivery —the beautiful theory so satisfactorily demonstrated by the lamented Franz Kilian. In this connection, he remarks that,—

In these changes, the body of the uterus, and the lining of its cavity, bear a far greater part than either the substance of its cervix, or the mucous membrane which line that canal. The mucous membrane of the body only is developed to the decidua, and it alone is thrown off after delivery; the lining membrane of the neck undergoes much slighter alterations, and is not deciduous. * * *

At present, we are too imperfectly acquainted with the nature of those changes, which I have thus briefly sketched, to be able to say exactly what influence is produced by the accidents which interrupt the course of pregnancy, and originate the processes of degradation of the uterine tissue prematurely; or what results may follow from disease succeeding to delivery at the full period. We may confidently hope, in time, to know more; at present, we have learned from every-day experience that such occurrences interrupt the ready return of the womb to the size and condition which are natural to it in the unimpregnated state; that the organ is apt to remain permanently increased in size; that this enlargement is often more especially marked in the more lowly organized cervix; that, under such circumstances, the menstrual function is usually, in some respect or other, ill performed, while secretions are likely to be furnished from the organ, differing in quantity and quality from those which proceed from it in a state of health; that the performance of all the sexual functions is very apt to be attended by pain; that impregnation is less likely to occur; and that, if pregnancy should take place, there is very great probability of its coming to a premature termination.

This set of symptoms, however, or, at least, many of them, are met with, independent of pregnancy and its consequences, supervening sometimes, indeed, under the influence of causes which evidently, and in a marked manner, interfere with the generative functions, but coming on at other times slowly, and, as far as we can discover, without cause. How are they to be explained? Do they proceed from an invariable pathological occurrence, which is present in every case, how wide soever may be, in other respects, the points of difference between them; or are they the indications of disordered functions, which may depend on causes as various as those which produce vomiting, or occasion dyspnœa? The inquiry is manifestly an important one; its elucidation will be the object of these lectures. It has been said that there is an invariable, or almost invariable, cause of these symp-

toms—that, be the remote occasion of them what it may, inflammation and ulceration of the neck of the womb is their immediate cause—that the key to the right understanding of uterine diseases is to be found in the correct appreciation of the importance of this condition, and the cardinal point in their treatment consists in the adoption of means for its cure.

After recapitulating the leading facts and inferences insisted on by Dr. Bennett and others, our author indulges in the following sarcastic, but, as we conceive, very just remarks:—

As uterine pathology is simplified, beyond expectation, by the discovery of an almost invariable cause of the most diverse symptoms, so uterine therapeutics, also, are made easy, according to the writers whose opinions I am relating, by one remedy being found almost always applicable for the cure, be the duration or its severity what it may. * * * What caustics to use, how often to repeat their application, how to prevent or to remove those inconveniences which sometimes result from their employment, are questions discussed as of chief importance; since to these remedies all other local measures, as well as all general treatment, are but secondary and subservient.

Dr. West remarks that the evidence by which to try the accuracy of such statements is very various in its kind, and also of very various worth. This evidence he arranges under four principal heads:

1. A comparison of these statements with what is known concerning the anatomy and physiology of the uterus in a state of health.

2. The microscopic evidences of morbid anatomy.

3. The evidence afforded by the history of those cases in which ulceration of the cervix uteri occurs, unconnected with other disease.

4. The frequency of ulcerations of the os uteri under those circumstances in which they ordinarily come under our notice, and call, or are supposed to call, for our interference.

After considering the evidence under the first head, Dr. West offers the following remark:—

If, structurally, so lowly organized—if, physiologically, of such secondary importance—if so much less subject than the body of the uterus to alterations in its intimate structure—and if so comparatively insensible even to rude modes of therapeutical interference—it certainly does appear to me that the assumption, that some slight abrasion of the mucous membrane covering this part is capable of causing a list of ills, so formidable as are attributed to it, ought to rest for its support upon some other and stronger foundation than any inference fairly deducible from anatomical or physiological data.

In seeking evidence under the second head, Dr. West has studiously avoided the errors and defects marking the statements and conclusions of such observers as M. Pichard, Dr. Ashwell, and M. Lair, the negative and indefinite results of whose necroscopic investigations on this

subject, are manifestly defective and valueless. The question which Dr. West seeks to decide, is, "With what frequency, and associated with what other changes, do we meet with indications of inflammation and ulceration of the os and cervix uteri, in the bodies of women after puberty, and especially during the period of sexual activity?"

Dr. West's observations, amounting to only sixty-two cases, were made on patients who died in the medical wards of St. Bartholomew's Hospital, of some other than uterine disease. Of these sixty-two cases, thirty-three uteri were found healthy, and twenty-nine diseased; ulceration of the os uteri existed in seventeen cases; existed alone in eleven; with diseased lining of the uterus, in three; and with induration of the walls of the uterus, in three instances. In five cases, there was found induration of the wall of the uterus, without ulceration of the os; and in seven cases, there was disease of the lining of the uterus, without any disease of the os.

After giving a very extended and minute history of the morbid appearances of the uteri in these twenty-nine cases, Dr. West remarks that—

Other evidence, indeed, must be adduced than that which analogical reasoning from the facts of physiology has suggested, or than that which examinations after death have furnished, before we shall be entitled to reject the opinion that inflammation of the cervix, and ulceration of the os uteri, are occurrences of very serious pathological importance, the occasion of nearly all the ills which affect the physical well-being of women. * * * Tempting though this hypothesis may be, and numerous the difficulties which it may appear to solve, we yet have found that it is opposed by the facts of physiology, and unsupported, to say the least, by the results of anatomical investigation.

As regards the evidence referred to under the third head, Dr. West considers, that "in almost every woman, whose uterus becomes prolapsed beyond the external parts, we may observe the effects which ulceration of the os uteri commonly produces, the symptoms to which it generally gives rise, etc."

It is from this class of cases that he adduces all his evidence of the negative and unimportant consequences of ulceration of the cervix uteri alone considered. But the conclusion expressed above, though apparently legitimate enough, is by no means necessarily correct; for it is sufficiently manifest, that whatever may be the extent of the irritation incident to the ordinary lesions and morbid conditions of the os uteri, and how important soever the sympathies thereby excited, the occurrence of the important organic displacement referred to is an event sufficiently grave, and perfectly adapted to absorb or obscure all other morbid symptoms and sympathies incident to the lesions in ques-

tion. It has fallen to our lot to have seen a large number of the unfortunate class of patients here referred to, and we have uniformly observed that the sufferings and the symptoms resulting from the displacement, have obscured all the ordinary symptoms incident to a morbid condition of the cervix uteri, however extensive the ulceration, congestion, or induration of this part. Further, we conceive that there is very little similarity between the ulceration occurring in the procedent uterus, and those morbid conditions usually seen in the cervix uteri *in situ.*

Under the fourth head, Dr. West enters upon a very extended and carefully digested series of investigations of what clinical observation generally teaches concerning ulceration of the os uteri—its course, symptoms, and importance. This series of investigations are included in twelve distinct divisions.

1. An examination of the question of the alleged peculiar susceptibility of the cervix and os uteri, and their readiness to take on ulcerative disease, etc. This investigation is based upon the history of forty cases in the venereal wards of St. Bartholomew's, in twenty-seven of which cases, Dr. West states that he found the os and cervix uteri absolutely healthy.

2. An investigation to determine the effect of the ulceration of the os uteri upon the fecundity of the female, based upon the history of 1960 married women, 980 of whom were healthy, and 980 of whom were suffering from uterine disease—117 of this number being cases of ulceration.

3. The period of life at which ulceration of the os uteri occurs most frequently.

4. Alleged causes of uterine ailment, and the ratio of ulceration in the same.

5. Duration of symptoms at commencement of treatment. (Showing that patients suffering from ulceration, do not apply for treatment at an earlier period, after attention is called to the uterine symptoms, than do those affected by uterine affections, without ulceration.)

6. A table showing the state of menstruation in cases of uterine disease, with and without ulceration of the os.

7. An examination of 258 cases of uterine disorder, in 240 of which there was leucorrhœa, to show the relation of that symptom to ulceration of the os uteri.

8. A table showing the seat of pain in the two classes of cases of uterine disease.

9. An examination with reference to the state of the uterus in the two classes of cases.

10. A table showing the different seats, and comparative frequency of different forms of ulceration of the os uteri, in 121 cases.

11. A table showing the degree in which the different forms of ulceration existed.

12. An examination of 16 cases, in which there existed extensive ulceration of the orifice of the womb, showing the various conditions of the uterus associated therewith.

The following are the most important conclusions to which Dr. West arrives, as the result of his statistical investigations:

1. Uterine pain, menstrual disorder, and leucorrhœal discharges—the symptoms ordinarily attributed to ulceration of the os uteri—are met with independently of that condition, almost as often as in connection with it.

2. These symptoms are observed in both classes of cases, with a vastly preponderating frequency at the time of the greatest vigor of the sexual functions, and no cause has so great a share in their production as the different incidents connected with the active exercise of the unproductive powers. But it does not appear that ulceration of the os uteri exerts any special influence either in causing sterility or inducing abortion.

Similar conclusions follow, also, concerning induration, and hypertrophy of the cervix uteri.

Thus it is seen that conclusions widely different from those given by Dr. Bennett, Mr. Whitehead, and others, are arrived at by Dr. West, by pushing investigations in a different direction from those popularly pursued, in reference to the questions at issue in uterine pathology. But legitimate and satisfactory as these conclusions of Dr. West appear, from the statistical data he has given, we do not conceive that these deductions can be considered as established facts in uterine pathology, any more than are some of the more crude deductions of certain pathologists, whose theories his figures seem to demolish. Every one who reads Dr. West's writings must be satisfied, however, that as an accurate observer and a truthful writer, he is perfectly reliable. The candor and the earnestness of his investigations, and also his mode of analysis and study of facts, are models for the pathological student. It is a sufficient criticism upon Dr. West's conclusions, as indicated above, to say that it is certain that some of them would be essentially modified if he should pursue a series of as rigid investigations in reference to the following questions:

1st. In the treatment of cases of uterine disorder, attended with lesions of the os and cervix uteri, what amount and kind of benefit is derived from attending to the special lesion in question?

2nd. What number of such cases prove utterly incurable, until special curative treatment is directed to the diseased cervix, and what proportion of the cases so treated do speedily recover?

3rd. What is the number and the character of those cases of abortion that are associated with disease of the cervix uteri, as the only discoverable disease of the generative organs, and in what proportion of such cases is recovery from the local disease followed by successful pregnancy?

In his closing lecture, Dr. West enters upon investigations of the greatest practical importance, concerning the various causes of the more common uterine ailments, and the constitutional and functional relations of such affections, the latter of which he considers of far greater practical importance than the former. In a large proportion of such cases, he finds, as the primary and principal derangement of health, a morbid state of the circulating fluids, dyspepsia, imperfect depuration of the blood, a rheumatic or other unhealthy diathesis, etc.; and lastly as a matter of prominent importance, he mentions the subject of morbid deficiency and morbid excess in the involution of the uterus, after delivery, as proposed by Prof. Simpson, in the *Edinburgh Monthly Journal*, for 1852. To inflammation and disease of the body of the uterus, and of the lining membrane of its cavity, Dr. West attributes far greater importance than to any abnormities affecting the cervix and os. In reference to granular inflammation of the os, and certain forms of ulceration, Dr. West makes some important suggestions. He justly remarks, that, with reference to the morbid state of the os uteri, there is much need of careful microscopic research.

On the subject of the popular therapeutical management of uterine disorders, Dr. West offers some searching and practically important criticisms which every physician should heed. So far as the use of the most potent caustics is concerned, he boldly avows their inutility, and even concerning the ordinary applications of nitrate of silver, etc., to the cervix uteri, he would dissent from the views popularly entertained. In his opinion, the treatment proposed by Dr. Bennett comes far short of that essential meed of merit, *tuto, cito, et jucunde.*

The questions proposed by Dr. West, and the discussion upon which he has entered in these lectures, are of the highest practical importance and interest, and they also possess the peculiar merit of originality and fairness, contrasting strikingly with certain crude and dogmatic attempts at similar efforts, put forth by Dr. Robert Lee, and others.

We are happy to learn that these lectures are soon to be republished

in this country, and this fact renders unnecessary any further notice of the work in this place. We feel assured that its intrinsic merits, and the peculiar excellencies of the author's style, will secure for it a more extensive reading than any similar treatise has enjoyed. All who peruse it must feel that its talented author has done a good work for the profession; yet it requires no spirit of prophecy to foresee that many a lance will yet be broken by the gallant knights of science, ere the great questions at issue between uterine pathologists, will be finally settled. E. H.

ART. XI.—*Epilepsy and Allied Affections.* By CHARLES BLAND RADCLIFFE, M.D., Assistant Physician to the Westminster Hospital. London: 1854.

THERE can be no more convincing proof that the web, which Aristotle threw around science, has been thoroughly broken and destroyed, than the publication of such works as the one whose title heads this article. Perhaps it is a fault of Mr. Radcliffe, as it is of many others, that he is too fond of erecting new theories, and discarding those sanctioned by time, but the philosophical and candid, as well as the able manner in which he thinks and writes, renders his pen attractive, whether or not we yield assent to his views. Certainly the doctrine of muscular contraction, which he attempts to overthrow, has been considered one of the best established in physiology.

It is held by Mr. R., that muscles, instead of contracting by the stimulation of vital and physical agents, contract only when this is suspended or diminished. Hence such facts as the following: the involuntary muscles, receiving in a less degree the stimulus of nerves and blood, contract more frequently and strongly than the voluntary; the rigor mortis occurs soonest after death in those who have been exhausted by old age or by chronic disorder; the sedative, cold, causes contractions, in other words, the absence of the stimulus, heat; when a muscle is at rest, the galvanometer indicates electric currents passing between its ends and sides; not from end to end, or side to side; during contraction, there are no currents whatever. (M. Dubois Reymond.) In other words, contraction occurs when electrical action is suspended. So a muscle in a state of permanent contraction, as from strychnia, or in tetanus, has no electric currents. (Reymond.)

If a temporary abeyance of vital electricity causes muscular contraction, why do currents of artificial electricity induce it? Mr. Radcliffe speaks thus on this point:—

Take a simple galvanic cell, and the skinned hind leg of a frog, and apply one pole to the end of the thigh, and the other to the foot. If the poles be so arranged that the current is from the foot to the thigh, a slight contraction happens on closing the circuit, and a violent one on breaking it; if, on the other hand, the poles are reversed, and the current be made to pass from the thigh to the foot, there is a violent contraction on closing the circuit, and a slight one on breaking it. The slight contractions only continue for a short time, but the violent contractions remain until the muscular irritability is exhausted.

Now in analysing this experiment, it must be remembered, that there is a natural current from the foot to the thigh, and remembering this, the explanation is not difficult. What then is the influence of the artificial current in relation to the violent contractions? When the natural and artificial currents pass in the same direction, each current must intensify the other, and yet the contraction does not happen until the artificial current is suspended. When, on the other hand, the natural and artificial currents pass in opposite directions, and the one must neutralize the other, the contraction happens during the time of neutralization. It is coincident with the negation of electrical action.

Chemical agents cannot be said to excite contractions. "On the other hand, chloroform, ether, alcohol, and some other agents, which are manifestly stimulant, cause decided relaxation in the muscular system, when they are introduced into the circulation."

Our limits forbid a farther examination of this new physiological doctrine, which is certainly ably and plausibly presented, and our readers must judge of its correctness for themselves. Its significance in a treatise on epilepsy and allied affections, is apparent. As in a physiological, so in a pathological condition, muscular contractions are due, Mr. Radcliffe thinks, to a lack, in one way or another, of the usual stimulation. Epilepsy, chorea, delirium tremens, mercurial poisoning, cholera, tetanus, ergotism, etc., are considered by him diseases of debility. Convulsions, under all the circumstances of their occurrence, are accompanied by the weak pulse, pallid surface, and other symptoms of debility, and when depleting measures are serviceable, they are so by relieving organs overpowered by congestion, or by deleterious substances.

The following quotations will show Mr. Radcliffe's treatment of epilepsy.

Good substantial food, of which a large portion is beef or mutton, is given to epileptics in many lunatic asylums, and with unquestionable benefit. For my own part, I am in the habit of recommending a very liberal allowance of stimulants, and I am fully satisfied, from the results of this practice, that there is no disease in which they are more needed than in epilepsy. I have notes of cases in which recovery was delayed until the patient had been persuaded to take wine. More than

once, a patient has told me, that he has succeeded in warding off a fit by a glass of wine, or by a draught of ale.

It is in keeping with these considerations, that epileptics are benefited by coffee, which is a powerful stimulant, and not by tea, which is a sedative.

Arguing from the great readiness with which the muscles are fatigued, and the very marked slowness of the reparative process after fatigue, the natural conclusion appears to be, that they ought to be rested rather than exercised; and experience confirms this conclusion.

After speaking of the administration of tonics, which he recommends, especially quinine and iron, and of turpentine and naptha, which, though beneficial to the epileptic, are disagreeable and nauseating, he proceeds:—

After this it occurred to me to try camphor, and this I did, in doses of two or three grains, either alone or in combination with quinine or iron, one or both, according to circumstances. Being given in the form of pills, it was free from the principal objection applying to the two former stimulants, and it had this peculiar advantage, that instead of irritating the urinary and generative organs, like turpentine, it exercised, or seemed to exercise a direct quieting influence upon them. In other respects, as tried in several cases, the result was not less satisfactory.

Next in order I gave a fair trial to chloric ether, and still with very decided benefit. Under ordinary circumstances I gave half-drachm doses of this preparation, either alone or in combination with the ammonio-citrate of iron, or quinine, or naptha, and in all cases, it proved to be a very favorite and effectual remedy, particularly with children. Sometimes I substituted Hoffman's anodyne in place of the chloric ether; and sometimes, when the need of a stimulant has seemed to be very urgent, I have associated the two; but it has always seemed that this form of ether is far less pleasant, and efficacious, than chloric ether.

In cases where, and at times when, an occasional stimulant effort was necessary, I have recommended the aromatic spirit of ammonia, either alone or in combination with ether, and the result has really been certain and satisfactory.

Mr. Radcliffe also recommends counter-irritants, and the hot bath as external stimulants.

The following extracts on the treatment of affections allied to epilepsy deserve attention.

In tremulous disorders abstinence forms no part of the treatment. A person who trembles habitually, whether young or old, trembles more before a good meal than after it. In chorea it is still the same.

The obstinacy of the laryngeal spasm in hooping cough is in direct relation to the debility of the patient. The corpse-like appearance of catalepsy is wholly inconsistent with the idea, that gluttony had been a cause of the disorder. Tetanus, likewise, in spite of all

prejudices to the contrary is now admitted to require the most assiduous administration of nutriment.

Tonics do not appear to be necessary, except now and then, in such chronic cases as chorea, hysteria, or catalepsy, or in such states of convalescence as follow after tetanus. In these cases, and under these circumstances, quinine and iron will probably be found to be the most valuable of this class of remedies. Stimulants, on the other hand, appear to be as indispensible as they are in epilepsy.

In ordinary tremulousness, sal volatile and ether are admitted remedies, and so are they in delirium tremens, in subsultas, and in mercurial trembling. In chorea I am in the constant habit of giving large doses of chloric ether, in conjunction with the ammonio-citrate of iron, and I can speak very positively as to the benefit resulting from this practice. I have not had the opportunity of carrying out these principles in hydrophobia; but if I had, I would do so without any hesitation. I would give frequent draughts of ether, and hot brandy and water, along with turpentine injections; and if the act of swallowing was very distressing, I would multiply the injections, and administer the ether and brandy in this manner.

In the spasmodic stage of hooping-cough, I can testify as to the great benefit resulting from large doses of chloric ether, along with steel or camphor mixture, according as the patient was anæmiate or not.

Mr. Radcliffe believes that chloroform suspends convulsions by its stimulating effect.

From the foregoing extracts the reader will learn the peculiar views of Mr Radcliffe, and the facts upon which they are based. The point of greatest interest is in reference to their influence upon the treatment of convulsive affections, and in this respect it will be perceived that he advances nothing new, but rather confirms the resort to, and perseverance in, the use of old remedies. The work is rather suggestive than practical, and will tend to awaken a new interest in the pathology of these obscure diseases, which must result in important discoveries.

ART. XII.—*Clinical Lectures on Pulmonary Consumption.* By THEOPHILUS THOMPSON, M.D., F.R.S., Physician to the Hospital for Consumption, and Diseases of the Chest. London. Philadelphia: Lindsay & Blakiston, 1854.

PULMONARY consumption is a disease so common, and one that has been so much studied, that it might be doubted whether any thing new can be offered on the subject. But if we mistake not, this treatise contains important practical matter, with which the mass of physicians are still unacquainted. The work comes to us strongly recommended,

from the favorable position of the author for studying this disease, as physician to a large hospital devoted exclusively to consumption. It contains the results of his observations and investigations of the most important and practical subjects connected with phthisis, with the statistics on which his conclusions are based. We shall merely present some of the more important facts brought to light by his labors, leaving it to the reader to receive the full benefit of the volume by its perusal. In speaking of the symptoms of consumption, the author makes the following interesting remarks on hæmoptysis:

The ordinary cause of hæmoptysis is doubtless, compression or obliteration of the pulmonary veins by the tubercular deposits, in consequence of which, blood interrupted in its natural channels, overflows or exudes into the neighboring bronchi. If this explanation be correct, hæmoptysis, moderate in amount, must be regarded rather as beneficial than alarming. By preventing the stagnation of unhealthy blood, it must tend to oppose the extension of tubercular disease, and as far as a conclusion may be drawn from the cases under my care, the influence of hæmoptysis of considerable amount would seem to have been rather favorable than otherwise. You will observe that some of the cases of phthisis recorded in the table, accompanied with copious hæmoptysis, were remarkably slow in their progress. In six of the cases, the quantity of blood expectorated at once has exceeded a pint, and the time which has elapsed since the occurrence of the profuse hæmoptysis to the present period, has been in these patients respectively, six months, twenty-two months, twelve months, ten months, eight months, and five years. * * * * It is better to moderate this symptom, by producing determination to other organs, than to employ direct astringents. You will find great benefit in many cases from the administration of a dose of calomel or mercurial pill, with henbane, followed by the use of half-drachm doses of sulphate of magnesia, with diluted sulphuric acid, administered twice a day.

The expectoration in consumption, Dr. Thompson divides into four kinds, corresponding with the stages of the disease; first, the salivary, or frothy; secondly, the mucus; thirdly, the flocculent; fourthly, the purulent, or porraceous. He believes that the proportion of salts in the sputum is in "an inverse ratio to the degree of inflammation present." "As an approximation to the proportion of saline matter in the solids expectorated, we may mention from twenty to thirty per cent in catarrh, from fifteen to twenty in the more opaque mucus of chronic bronchitis, and rather less than ten in the puriform expectoration of advanced phthisis."

The author speaks of a microscopic plant, resembling the torula of the yeast, which he found in the sputum of a boy, and which he thinks came from a cavity under the right clavicle. This cryptogamic growth from the lungs, appeared identical with that discovered by Dr. Hughes

Bennett, and described by him in the *Transactions of the Royal Society* of Edinburgh, for 1841.

The pulse of the consumptive, Dr. T. regards of considerable diagnostic value. That of a healthy adult has been shown by statistics, collected by Dr. Guy, to vary in frequency according as the individual is sitting or standing; pulses of 60, 80, 100 and 120 in the sitting posture, rising respectively to 66, 93, 119, and 147 when standing. In the phthisical he remarks:

The difference produced by change of posture is comparatively trivial. * * * In cases of debility, change of posture produces so much more effect on the pulse than in the healthy state, that Dr. Knox regarded this indication as a sort of asthenometer. The importance of this fact, in connection with our present subject, is obvious; since the debility associated with phthisis might be expected to counteract rather than to produce the inaptitude of the pulse to be modified by change of posture. If you compare the pulse of a consumptive patient on different days, you will often find that its variations in frequency are more considerable than can be readily explained; but on the days when the pulse is the least frequent, you will usually find the difference produced by change of posture to be greatest.

The author believes, that, as phthisis advances, the amount of solid constituents in the urine undergoes a change; the uric acid increasing, and the urea diminishing. His explanation of this is, that defective aeration of the blood prevents the conversion of uric acid into urea, and he has noticed, that during the administration of cod liver oil, the proportion of these elements became more natural.

In the following extracts, we learn the author's appreciation of prolonged expiration, as a sign of tuberculous deposit in the lungs:

During the time of my attendance on the out-patients of this institution, I made this symptom, prolonged expiratory murmur, an object of particular notice, and among 2000 consumptive patients, it proved to be the most remarkable of the physical signs, in 288; those cases presenting bronchial complications being excluded. Hæmoptysis had occurred in 91 of these cases, that is in 31 per cent., a proportion calculated to confirm my opinion of the significancy of the prolonged murmurs, and at the same time sufficiently below the average frequency of hæmoptysis in the first stage of phthisis, to support the assumption that the prolonged expiratory murmur takes precedence of other characteristic signs, which are commonly assumed as requisite, in order to prove the existence of consumptive disease.

With a view to the correct appreciation of the sign under our consideration, keep in mind the situation, degree, persistency, and simplicity in which it is presented. Prolonged expiratory murmur, slight in degree, if heard only on the right side is inconclusive, but if confined to the left, is far more significant. The more limited the space over which it is heard, the greater the probability that phthisis is the

cause. The persistency of the sign, for a considerable period, if unattended with symptoms of bronchitis, emphysema, or pneumonia, indicates some permanent obstacle to the free exit of the air, and, in a majority of instances, this obstruction is of a tuberculous nature. In cases depending on pulmonary congestion, the expiration, after cupping and other appropriate treatment, usually resumes its natural character; but excluding this, and other complications, before noticed, I have not recorded any instance, in which this sign, once fully established, ever ceased to be obvious, unless superseded by other signs.

Although in many instances, no specific complaint was made by the patients, except of debility, and although, in this respect, improvement occurred under suitable treatment, it was yet common for the murmur to increase in duration, and deviate more and more from its natural character, whilst sooner or later, dull percussion, bronchophony, hurried breathing, quick pulse, emaciation, and night perspirations, too often occurring in succession, afforded affecting testimony to the correctness of the first diagnosis.

Fistula in ano, according to Dr. Thompson's statistics, has a decided retarding effect in the course of phthisis, and should be considered a salutary complication. He says:—

Among the causes tending to retard the progress of pulmonary consumption, I am disposed to mention fistula in ano. A few years since there happened at one time to be under my care nine consumptive patients, affected with this disease. I had the curiosity to inquire into the duration of the malady in each case, and found, on adding the periods together, and dividing by the number of patients, that I obtained an average of two years and nine months, although the disease had not in any instance, advanced beyond the first stage. When you reflect that the duration of phthisis in a majority of cases, does not exceed eighteen months, you will concur with me in the impression, that fistula may possibly, in the way of derivation or counter irritation, retard the progress of the malady. Practically, this subject claims particular attention. When the surgeon operates on fistula in the phthisical, the wound is inapt to heal; but, were it otherwise, the operation would be a measure of questionable propriety, if the disease tends directly or indirectly to abate consumption.

After describing the diarrhœa attending phthisis, and objecting to the more powerful astringents, as likely to produce the opposite condition of the bowels, Dr. T. observes:—

On the whole, there is no remedy for this affection, which has acted so satisfactorily under my observation, as the trisnitrate of bismuth, which I commonly administer at intervals of four or six hours, in doses of five grains, combined with three grains of gum arabic, and two of magnesia. A larger dose may be given with safety, but that specified, has appeared to me the most appropriate for the purpose. It is probable that in many cases phthisical diarrhœa depends more on the condition of the vessels in the neighborhood than on the ulcers themselves, and the bismuth probably exerts a tonic influence on these

vessels, as well as on any ulcerations. This opinion is not altogether speculative, since I have had opportunities of observing the power of this remedy, when scattered over the languid granulations of cutaneous ulcers, in restoring them to a firm and healthy character. The bismuth is not so prompt in its effects as acetate of lead, and therefore requires to be used with perseverance, but when care has been used to correct collateral derangements, I rarely fail in two or three days to observe amelioration of the symptoms, with this advantage—that the good effect is permanent, and without incidental disadvantages. Indeed it usually gives a better tone to the digestive organs generally, and corrects the sinking feelings about the epigastrium, with which the consumptive patient is occasionally distressed.

The following remarks relate to what the author terms wavy inspiration:—

The inspiratory sound instead of being equally sustained from its commencement to its termination, is divided into several parts. Sometimes it is more feeble than natural; at other times rather harsh, but not necessarily altered in character.

An examination of my notes, recording the history of about a hundred patients, in whom wavy inspiration was a principal symptom, has convinced me that there are certain varieties of this kind of inspiration, with which it is important to be familiar. One of these varieties probably depends on obstruction to respiration, produced by pleuritic adhesion. This variety of the sign occurs in nearly equal proportion on the right and the left side; it is, I think, increased by pressing the stethoscope firmly over the part: it is often attended with pleuritic friction sound, and is usually very distinct.

Another variety is apparently associated with rheumatic conditions. The wavy inspiration thus produced is usually high in tone, often rather widely diffused, and variable in situation, and usually accompanied by pain in the part. In confirmation of the opinion just expressed, it may be incidentally mentioned, that small doses of colchicum are useful in the treatment of this affection, and that the use of lemon-juice is likewise advantageous. This latter remedy has also appeared to me of service in some instances of intercurrent pleurisy in the consumptive.

A third variety occasionally accompanies bronchial affections, and under such circumstances the cause may be detected by the coexistence of ronchi and other symptoms characteristic of bronchitis. Interrupted inspiration, however, according to my observation, in a great majority of instances, has no necessary relation to either of these conditions. The sign, in a very large proportion of cases, is limited to the left side, (contrasting remarkably in this respect with prolonged expiratory murmur,) and this fact is inconsistent with the idea of its necessary dependence either on pleurisy or phthisis. The usual situation of the sound is near the apex of the lungs in front, but occasionally I have observed it at the posterior part of the chest, where, indeed, it may occasionally be present without attracting notice. * * * I was once accustomed to regard the sign which I have now brought un-

der your observation, as a proof that phthisis had actually commenced, but more extended opportunities of watching patients, in whom it has continued for many years, without becoming complicated with any other indication of disease, have induced me to modify that opinion. It is true that I have certainly often observed wavy inspiration at one part of the chest when pectoriloquy or cavernous respiration could be elsewhere detected, or when other indications, local or general, of advanced consumption have been present, and in a greater number of instances, the wavy inspiration has been superseded by the occurrence of bronchial respiration, dullness on percussion, dry crepitation (crackling) or other more or less decided evidences of the establishment of phthisis; but in a still greater proportion of cases it has continued for a considerable period, to be the only important evidence of deviation from the natural state. Often, indeed, I have watched the symptom for years, without observing any transition to serious disease. Of 105 cases, carefully recorded in the course of an investigation which I formerly made, regarding this symptom, 32 afforded grounds for suspecting tubercular disease; such, for example, as dullness on percussion, or prolonged expiratory murmurs; in 22, hæmoptysis had occurred; in 3 a murmur could be heard over the pulmonary artery. But of the remainder, many were not affected even with a cough, and their complaints were usually expressed in general terms, as of "delicate health," "easy fatigue;" or if they made any reference to the chest, it was seldom of any thing beyond slight oppression of respiration, or of "seeming to breathe through thin cambric." It is, therefore, reasonable to conclude, that, if this form of interrupted inspiration be an indication of tubercular disease, it is the earliest local sign with which we are acquainted. The question, however, naturally occurs, can this symptom depend on mere functional disturbance, and disappear, leaving the subject of it in apparent health?

Having devoted some attention to this inquiry, I must acknowledge that although wavy inspiration, when dependent on pleurisy, bronchial affection, or rheumatism, may disappear, I have not satisfied myself of its removal, (unless superseded by more serious symptoms,) in any instance unconnected with the conditions which I have specified.

It will be remembered that Dr. Thompson's lectures, when published in the *Lancet*, attracted considerable attention from the author's investigation of the red margin on the gum, and the importance which he attached to it, as a sign of phthisis. We take the following, on that subject, from the work before us:—

In the investigation of chronic diseases, one of the most important objects is to ascertain, as far as possible, the condition of the blood, and the degree of firmness or tenuity of the bodily structure in general. * * The introduction of some poisons into the system, is occasionally manifested at the edge of the gums, where they are reflected around the teeth. * * Considerable attention to this inquiry, has impressed me with a conviction of the frequent existence, in consumptive subjects, of a mark at the reflected edge of the gums,

usually deeper in color than the adjoining surface, and producing a festooned appearance by the accuracy with which it corresponds with the curve of the gingival border. This mark is, in some patients, a mere streak—in others, a margin, sometimes more than a line in breadth. In the most decided cases, this margin is of a vermilion tint, inclining to lake. * * As a general rule, the line is most distinct around the incisor teeth, but it is frequently apparent also round the molars.

I have requested my clinical assistant Dr. Bateman, to draw up a table of the appearance of the gums in the forty-seven cases under his immediate supervision. In the first division, containing the particulars of twenty-six men, you observe that only six are free from the margin, and that twenty who present the margin, have also distinct symptoms of consumption. In five of those without the line, there is also freedom from other consumptive symptoms; the diseases in these patients being respectively emphysema of the lungs, hydatid cyst, diseased liver, pleurisy, and diseased heart. Only one of the phthisical males, a boy, aged twelve, has unstreaked gums; and although the margin is occasionally observable in children, it appears to me, as far as I have yet noticed, to be more frequently absent in them than in adults. * * *

You will see that of twenty-one phthisical women, there are no less than eight without the margin, and it is remarkable, that in each of these cases there is cavernous cough or other undoubted evidence of the existence of vomica. The exceptions amongst the female patients are far more frequent, as is apparent from the table.

Mr. Thompson says that this appearance is not confined to advanced phthisis, but is sometimes one of the earliest signs present.

In the hospital with which the author is connected, more than 600 gallons of cod-liver oil are used annually in the treatment of phthisis.

Our usual plan, says he, is to give one or two drachms twice a day at first, gradually increasing the quantity to half an ounce three times a day, and I have seldom found any advantage accrue from going beyond this limit. * * You may wish to form an opinion regarding the comparative efficacy of the different kinds of cod-liver oil. In my early trials of the remedy, six years since, forty or fifty cases were treated with the coarse kind, resembling what is used in preparing leather, and the average benefit derived, did not materially differ from that effected by the purest varieties subsequently employed. At a later period, I had the curiosity to try these different kinds, combined with liquor potassæ and peppermint oil, giving alternately the coarse and the purified cod oil, and recording the report of the patients; and it is a curious fact, that the majority actually gave the preference to the mixture in which the coarser oil was introduced. Objections have been made to this combination as complicating the treatment with the addition of a medicine, by some persons supposed to be inappropriate; but my experience is favorable to the use of liquor potassæ, especially in the early stage of phthisis, and theoretical arguments might be adduced in its favor.

Occasionally, although not frequently, the stomach rebels against the oil however purified, and in whatever combination; and I have been accustomed in consequence, under such circumstances, to introduce the oil endermically.

Three years since I was requested to see a gentleman, from the country, confined to his bed, emaciated, hectic, and, apparently, failing rapidly, with a cavity at the apex of the right lung. There was considerable diarrhœa and thinking the internal use of cod oil unseasonable, I ordered an ounce, combined with oil of lavender, to be rubbed into the chest night and morning. This gentleman gradually rallied, and returned to the country, where he advanced much in strength and weight, and rode about on horseback. I examined him last year, and, judging from the physical signs, found the size of the cavity materially reduced.

Other cases are given, showing, apparently, benefit from cod-liver oil thus used, and the author quotes from a Dr. Klencke, who believes that he has improved the condition of cats and dogs, by an endermic application of this agent.

Dr. Thompson is of opinion that hæmoptysis, when active, contra-indicates the use of the oil, as this enriches the blood, but when the hæmorrhage is passive, "means which tend to enrich the blood, are calculated to lesson the hæmorrhagic tendency, and its occurrence is by no means an adequate reason for the discontinuance of the oil." So diarrhœa, unless there be an erethitic state of the alimentary mucous membrane, the author thinks does not contra-indicate its use; on the other hand, he believes the medicine rather astringent than laxative.

An account of Dr. Thompson's experiments with various remedial agents should not be omitted. Considering the composition of cod-liver oil, he was induced to try animal charcoal, in doses of fifteen to twenty grains, but with no perceptible benefit, except, that it occasionally checked diarrhœa. Olive and almond oils, were also useless, and the former occasionally caused nausea. The animal oils, at the head of which stands cod-liver oil, he considers of undoubted benefit. In 1849 he treated fourteen patients with oil obtained from the foot of the young heifer (neat's-foot oil). Three of these patients derived essential benefit, the disease being arrested, four were slightly relieved, five received no obvious advantage, and two retrograded rapidly. Excepting cod-liver oil, this remedy was the most beneficial of any tried. Sperm oil, and almond oil, with phosphorus—the phosphorus being given because cod-liver oil contains it—appeared productive of some, but not very decided benefit.

The author quotes from various writers to show that in different countries and ages, remedial powers has been attributed to the fish and other animal oils, and he continues—

The conclusion to which the observations just detailed conduct us, is, that the other varieties of fish oil, differ from that obtained from the liver, rather in degree of palatableness and agreeableness to the stomach, than in any essential difference of virtue; that neat's-foot oil is less strictly similar; modifying the blood, indeed, in a corresponding manner, but differing from the liver oils in degree of aptitude for assimilation, according to peculiarities in the digestive organs of the individual patient. It may therefore be regarded, not so much as an equivalent, as a rival to the cod-liver oil. Where cod oil fails, sperm or whale oil would probably be useless, but the failure of the oleum jecoris aselli is no proof that the oleum bubulum may not be administered with the hope of advantage, and from its greater cheapness, and less penetrating odor, it might be largely tried in the way of inunction. Either oil may sometimes be advantageously substituted for the other, and although that of the cod will in the majority of cases prove most effectual, I think you are now in the possession of facts showing that the neat oil is likely to prove a useful addition to our medical resources, and that both these oils probably act similarly, in combining with albumen, and assisting in the supply of the chyle granules which enrich the blood.

I must not conclude this letter without impressing on you the importance of the persevering use of animal oils, when they are found appropriate. We must give them sometimes alternated with steel, or other tonics, even for many years, if we would overcome the liability to a return of the symptoms.

The statement made in this lecture regarding vegetable oils requires an important qualification, in consequence of experiments which I have made during the first eight months of the present year (1853), with oil of cocoa-nut, which appears to me to possess medicinal properties similar to those of cod-liver oil. The results in the first thirty patients to whom I administered it, bear comparison with those obtained in the first thirty-seven patients for whom I prescribed cod-liver oil, chiefly in the year 1845, as related to the *Medical Society* of London, and briefly described in some of the medical journals (*Lancet*, June 27th, 1846.) Amongst the patients to whom cocoa-nut oil was given, there were some instances of arrested phthisis, as decided as any I have been accustomed to attribute to the use of cod-liver oil, over which it possesses advantages in reference to economy and palatableness; and it is interesting to remark, that its efficacy was experienced by some who had previously taken cod oil uselessly, and by others who had discontinued it on account of nausea.

We cannot close this notice of Dr. Thompson's work, without expressing our satisfaction in its perusal. The position of the author, the statistical data upon which his conclusions are based, and the candor which marks his reasoning, will render his treatise acceptable to the profession.

BIBLIOGRAPHICAL NOTICES.

ART. XIII.—*Archives de Physiologie de Thérapeutique et d'Hygiène, sous la Direction de* M. BOUCHARDAT. No. I. January, 1854. Germer Baillière, Paris. pp. 376.

THE first number of this periodical has been received from the publisher. According to the announcement, the *Archives* will be issued quarterly in numbers of from 150 to 300 pages in 8vo. The number before us contains the elaborate Essay of M.M. Homolle and Quevenne upon Digitaline, which obtained the prize of 1000 francs in 1844, from the Société de Pharmacie. As we have already given our readers, in a former number of this journal, (Sept. 1851,) an analytical notice of this monograph, we have only to add, that its authors have continued their investigations with a painstaking, conscientious spirit; but so far as we have discovered, have not found reason to change the opinions which they expressed in the original article, and have rather strengthened old facts than added new ones. They have pursued a system of vigorous experimentation which gives to their work an exact and scientific tone; and we shall expect to find the same qualities in the future numbers of the *Archives*, as it is the intention of the director to publish therein those researches which have been pursued for a series of years, and have been executed upon so large a scale, that they cannot find a place in the ordinary scientific periodicals.

The May number contains a memoir of M. Quevenne, upon the physiological and therapeutical action of the preparations of Iron. Each number will be devoted to one monograph on some special subject, and will be sold separately.

ART. XIV.—*Anatomical and Physiological Observations.* By JOHN STRUTHERS, M.D., Lecturer on Anatomy. Part II. Edinburgh: 1854. 8vo. pp. 239.

THE essays which this volume comprises, have for the most part already appeared in the Medical Journals. They were originally prepared for the students which attended the author's lectures, during the last winter, and now appear in a separate volume, with such notes and additions as his other engagements would allow him to make. These papers are sixteen in number, under the following heads:—1. On the Supracondyloid Process; 2. On the Oblique Muscles of the Eye in Man and Vertebrate Animals; 3. On Double Stomach in Man; 4. On the Nerves of the Orbit; 5. On open Foramen Ovale and the Fœtal Heart; 6. Case in which the Pulmonary Artery gave origin to the Descending Aorta and Left Subclavian Vein; 7. Anatomical Inquiry into the Mode of Action of local Blood-Letting; 8. Dissection in a Case of Paralysis of the Common Motor Oculi Nerve; 9. Description of an Esquimaux Female Pelvis; 10. On the Semilunar Valves of the Heart; 11. On Rudimentary Ribs; 12. On Branches from the Fifth Pair of Nerves to the Muscles of the Eye; 13. On Diverticula from the Small Intestines; 14. On various points of Anatomy, considered in a Review; 15. On the Abnormal Anatomy of the Arm;

16. On the Fascia of Scarpa. In the preparation of these papers, the author exhibits much patient research, with a philosophical cast of thought. The contents of the second part are announced in this, and we shall forbear noticing critically any of these papers, until the appearance of that volume.

ART. XV.—*The Modern Treatment of Syphilitic Diseases, both Primary and Secondary; comprising the Treatment of Constitutional and Confirmed Syphilis by a safe and successful Method;* with numerous Cases, Formulæ, and Clinical Observations. By LANGSTON PARKER, Surgeon to the Queen's Hospital, Birmingham. From the third and entirely re-written London Edition. Philadelphia: Blanchard & Lea, 1854. 8vo. pp. 316.

SINCE the issue of the first edition of Mr. Parker's work, in 1838, Syphilis has been studied in all its forms, with a degree of enthusiasm and rivalry never before known. That edition was nothing more than a compilation, and as such reflected very truthfully and completely the existing state of knowledge on that subject. The present edition, however, makes somewhat higher pretensions. It is in truth a new work, as every line has been carefully revised, and entirely re-written where the author's views have changed, and the whole amount of matter has been greatly increased by the additions which have been made. It contains now the result of the author's experience in hospital and private practice, extending over a period of twenty years, during which he has personally treated more than eight thousand cases. These cases have all been carefully tabulated, thus rendering available in the preparation of the present work, a vast amount of valuable clinical knowledge. The opinions here advanced, and the rules of practice recommended, may, therefore, well be regarded in the light of high authority. The author enters but little into a discussion of the mooted points of the subjects which he treats, directing attention rather to matters of practical interest. The work abounds with details of illustrative cases, and the most useful formulæ in the treatment of the various forms of this disease, are very properly given.

ART. XVI.—*A Clinical Introduction to the Practice of Auscultation, and other modes of Physical Diagnosis, in Diseases of the Lungs and Heart.* By H. M. HUGHES, M.D., Fellow of the Royal College of Physicians, etc., etc. Second American, from the second and revised English Edition. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 304.

Auscultation and Percussion. By DR. JOSEPH SKODA. Translated from the Fourth Edition, by W. O. MARKHAM, M.D., Assistant Physician to St. Mary's Hospital. Philadelphia: Lindsay & Blakiston, 1854. 8vo., pp. 380.

THE two works whose re-publication is here announced, are of widely different pretensions as well as merit. The work of Dr. Hughes is designed as a manual for the student, "to prepare and to help him to examine for himself," and for that reason is "simple, plain, and colloquial." The well known facts in auscultation and percussion, are

stated concisely yet intelligibly, to the avoidance of the introduction of extraneous matter, and the discussion of merely theoretical notions. It is well adapted, therefore, as a manual for the learner, or as a guide book for the practising physician, who has no leisure to search for practical hints in large treatises. It will be perceived that this is the second American, from the last revised and enlarged English edition.

The work of Professor Skoda, of which we now have the pleasure of welcoming an American edition from the translation of Dr. Markham, belongs to a far more consequential and important, yet not less useful class of publications. The author cultivates the field of original inquiry, and boldly advances as the pioneer in the science of physical diagnosis. The peculiar views advanced in this volume have now been before the profession since 1841, when the first edition was published at Vienna, and have during that long period been the subject of unsparing criticism. Still they have quietly triumphed over the prejudices of professed critics and jealous rivals, and the fourth edition of his work finds many and ardent admirers. We must reserve for a future occasion an illustration of the theories of Professor Skoda, many of which from their direct antagonism to commonly received opinions, deserve the most serious and attentive consideration. Meanwhile we commend this work to the attention of the student of physical diagnosis, and urge its careful perusal both from the high position and authority of the author, and the intrinsic merit of his investigations.

ART. XVII.—*Healthy Skin: a popular Treatise on the Skin and Hair, their Preservation and Management.* By ERASMUS WILSON, F.R.S., Author of "a Treatise on Diseases of the Skin," etc. Second American, from the fourth and revised London Edition. With Illustrations. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 291.

THIS little volume designed for popular instruction, in regard to the management of the skin in health and disease, has been well received, as is seen by the demand for the fourth London, and a second American edition. Mr. Wilson ranks deservedly among the best teachers in this department, and his work as we should anticipate, abounds in useful and instructive matter.

ART. XVIII.—*A Universal Formulary: containing the Methods of Preparing and Administering Officinal and other Medicines;* the whole adapted to Physicians and Pharmaceutists. By R. EGLESFELD GRIFFITH, M.D. A new edition, carefully revised, and much extended, by ROBERT P. THOMAS, M.D. With Illustrations. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 651.

THIS edition of Dr. Griffith's work, has been greatly improved by the revision and ample additions of Dr. Thomas, and is now we believe one of the most complete works of its kind in any language. The additions amount to about seventy pages, and no effort has been spared to include in them all the recent improvements which have been published in Medical Journals and systematic treatises. A work of this kind appears to us indispensable to the physician, and there is none that we can more cordially recommend.

PART THIRD.

FOREIGN MEDICAL RETROSPECT.

PRACTICAL MEDICINE.

Abdominal Tympany.—The following interesting clinical lecture by Dr. O'Ferrall, we take from the *Dub. Hos. Gaz.*—Abdominal tympany is met with under various forms; it announces the meteorism of fever, and it accompanies many of the inflammatory and nearly all obstructive diseases of the alimentary canal. There is one form, however, which seems allied to the condition termed hysteria, but which presents some physical characters simulating organic disease, and which requires some patience and care in order to establish a satisfactory diagnosis.

A girl, twelve or thirteen years old, is brought to you for advice, on account of supposed abdominal disease. You observe that she is pale but not emaciated; that the abdomen projects unnaturally, and that her mode of progression is very peculiar. The chest is thrown back, the arms hang, the spine is remarkably curved, and the child walks exactly like a woman ballancing a large ovarian tumor or gravid uterus. The usual percussion in the erect position will soon enable you to assure yourself that there is no dropsical effusion into the peritoneum. You now proceed to examine the abdomen in the horizontal position. Expiration is imperfect, and the respiratory act becomes frequent and embarrassed as the examination proceeds. You remark that the tumefaction is not uniform; a shallow transverse depression running across, a little above the umbilicus, marks the abdominal swelling into two portions. In a girl, aged thirteen, recently measured, the circumference of the abdomen across the upper portion was 32 inches; across the lower portion of the abdomen 59½ inches; and across the middle, 27½ inches. The abdomen generally feels resisting, and remarkably elastic; the resistance at the right hypochondrium gives a sensation of a more solid nature, and in some instances pressure in this situation appears to make the patient wince. It deserves to be remarked, however, that the seat of sensibility is not always the same in different cases. Percussion over the lower half of the abdomen elicits a loud and prolonged resonance; over the left hypochondrium the tympathy is short and more acute in tone, while in the right hypochondrium a distinct and marked dullness is afforded to percussion.

Now with this evidence before you, to what conclusion can you rea-

sonably arrive? There is no dropsy, and the existence of mesenteric or malignant disease appears opposed by the general condition and expression of the patient. Hepatic enlargement appears the most probable supposition. But the position in which the patient is lying, with the spine arched prominently forward, instead of receding from the pressure of examination, throws a difficulty in the way of this opinion. This want of accordance between the symptoms and physical signs, leads you naturally to examine the thoracic cavity. You proceed to percuss the right chest from above downwards; percussion yields a clear sound down to, and even below the very margin of the false ribs. This solves the difficulty, and proves that the dullness in the right hypochondrium cannot proceed from enlarged liver, because, if this viscus was enlarged, its increase in the upward direction would necessarily have compressed the lung, and produced dullness as high, perhaps, as the nipple.

But there is the hypochondriac tumor, what can it be? If not an enlarged liver, what is it? Why, manifestly, a displaced liver. There is dullness on percussion below the margin of the false ribs, where it ought not to be; and above the margin of the ribs, where it ought to be dull, it is clear. Something has evidently pushed the liver down from its place, and against the anterior walls of the abdomen; what can that be? It is not any thing contained within the cavity of the thorax. There is no evidence of either emphysema, pneumothorax, nor empyema; and if nothing within the chest has pushed down the diaphragm, in the manner indicated by the displaced liver, it is most likely that the diaphragm must have descended by its own contraction. It is difficult to imagine a strained contraction of a muscle, like the diaphragm, for long periods of time; but there seems to be no other means of accounting for the phenomena. And when we consider the many well authenticated cases of long-sustained muscular tension which have been recorded as having occurred in catalepsy, as well as in the so-called mesmeric condition, it does not appear unreasonable to suppose that such a persisting contraction of the diaphragm and abdominal muscles may be maintained in certain states of the nervous system, and produce physical signs similar to those I have described. Watchfulness is often a characteristic of this peculiar condition. In general, it will be found impossible to discover the patient in a state of sleep so profound as to render them unconscious of examination.

In a case of this kind, recently under observation in St. Vincent's Hospital, all other means of procuring temporary relaxation of the muscles having failed, it occurred to me that the cautious use of chloroform might be employed for this purpose. This was done before the class of pupils, to whom, as an instance of abdominal tumor, the case was an object of peculiar interest. Being very cautiously employed, the chloroform was very slow in its operation. The pulse remaining satisfactory, it was persisted in until a condition of sleep was produced. The most remarkable change now took place in the appearance of the abdomen. The recti muscles became relaxed, and sank backwards, until the surface of the abdomen became actually concave. The upper

and lower tumor subsided, and now, on percussion, the dullness beneath the ribs was replaced by a moderate degree of resonance, and percussion on the lower ribs no longer sounded preternaturally clear; the diagnosis was complete. As soon as consciousness returned, the tumor was found to possess every character as before described.

Sir Benjamin Brodie has described a curious state of the voluntary muscular system, in which paralysis of the lower extremities was supposed to exist, but in which there is really only required a strong will on the part of the patient in order to develop the seemingly absent power. In practice we frequently meet with such cases, and there is reason to believe, with Sir. B. Brodie, that the want of a strong will to execute the power is the essence of the morbid condition. It would be a curious subject of inquiry, whether a condition nearly opposite of the nervous system may not exist, in which with scarcely a consciousness on the part of the patient, muscles known to be voluntary are capable of extreme and prolonged contractions, in defiance of all advice or persuasion, and to the manifest inconvenience, and even suffering, of the individual.

Cases like that here described are occasionally subjected to treatment, the result of erroneous diagnosis, founded upon a hasty or imperfect physical examination. I have known instances where the iodine plan was carried to its utmost limits, in the hope of reducing a supposed abdominal tumor. The treatment should consist of such means as are calculated to improve the general tone of the system and promote a cheerful temper; shower baths, calisthenic exercises, and exercises in the open air. The bowels are, in many cases, regularly moved, although the swelling persists, and terebinthinate purgatives have no effect upon it. I have known the lower swelling diminished by the rectum tube, but the return of the swelling almost immediately succeeds its employment. The chalybeate preparations are generally indicated by the state and appearance of the patient. Moral treatment is not without its influence; but nothing in this way will avail without obtaining the confidence of the patient in your friendly disposition towards them.

The physical diagnosis is, in those cases, that on which you must rely, to prevent your employing injurious remedies. Now, in a careless examination, physical evidence might create a difficulty; if limited to the abdomen itself, it might confirm any previous suspicion of the existence of abdominal disease; extending, however, the field of its application, physical evidence removes the difficulty, and throws a clearer light upon the physical condition of the organs. Physicians of large experience must be familiar with, and prepared for such difficulties; but the student cannot have too many aids to guide him in his investigation of obscure disease.

[The employment of Chloroform in hysterical cases simulating pregnancy has been highly recommended by Prof. Simpson. The distended abdomen immediately becomes collapsed, and admits of the most satisfactory exploration.]

On the Treatment of Gangrene of the Lung by Inhalations of Turpentine Vapor.—Four cases of gangrene of the lung have been treated by Professor Skoda in the following manner: The essence of turpentine is poured upon boiling water, and the patient is directed to inhale the vapor for fifteen minutes every two hours. Sulphate of quinine is administered also in the usual doses. The first case was that of a servant affected with limited gangrene of the superior lobe of the right lung. After six weeks of this treatment, it became impossible to detect either infiltration or gangrene of the organ. On the contrary, the respiratory murmur had returned over the whole region. Three months afterwards the patient was seen in good health. In the second case, an inn-keeper of mature age and strong constitution became the subject of a gangrenous cavity in the lower lobe of the right lung, consequent upon disease commencing March 11, 1852. On March 21, the patient commenced the inhalations of the vapor of turpentine: he continued without repugnance, for five or ten minutes every two hours, taking, at the same time, the usual doses of quinine. At the end of three weeks, the expectoration, which had been extremely abundant (a pint and a half daily,) became reduced to a quarter of a pint. The inspirations had been employed four times a day. At the end of six weeks, the patient could quit his bed. His strength was returning, the appetite was improved, and his general aspect favorable; but the expectoration continued to be fetid from time to time, and was always sanious. The right side of the chest was painful, and respiration labored, but the air entered the circumference of the lower lobe; the respiration being uncertain and accompanied by feeble râles and sibilance. The patient went into the country, where he continued the turpentine inspirations twice a day up to the middle of July, when both cough and expectoration had entirely disappeared. In the month of December, 1852, he came to M. Skoda for a certificate of health. There was no pain, nor oppression, nor cough. He had recovered his *embonpoint* and his strength; there was no retraction of the thorax; vesicular respiration every where. In the third case it was not in the Professor's power to persist in the plan. The fourth case is still under treatment. A butcher, of strong constitution, had a gangrenous cavity in the inferior lobe of the left lung. He fell ill about the end of May, 1852. The inspirations of turpentine were commenced June 4. At the end of a week, the fetid expectoration, which daily equalled two pints, had entirely disappeared, and the patient considered himself well, because the pain and the oppression in breathing had diminished; the appetite was returned, and the sleep was tranquil. He, therefore, left off inhaling the turpentine, which was extremely disagreeable to him. On June 19 there came on a severe shivering fit, with cough and dyspnœa, and during the following night the patient expectorated several pints of extremely fetid sanies of dirty brown color. The inspirations were recommended, but the patient used them as little as possible, on account of the irritation which they produced in the air-passages. In eight days the quantity of matter brought up had greatly diminished, and the pulse was normal, but there was pain in the chest. The patient lay immoveable upon his back in a state of great weakness and pros-

tration; there was no appetite. The lower lobe of the left lung was impervious to air. The inspirations were again suspended, but again recommenced on account of the recurrence of the bad symptoms; the disagreeable odor of the turpentine being partly rectified by a few drops of the essence of rose. About the middle of October he was able to go into the country, having recovered strength sufficient to leave his bed; nevertheless there remained a sense of oppression and pain under the left scapula. At the end of January he considered himself well. There was a sudden expectoration of two ounces of blood, after a slight fit of coughing, on February 10, probably proceeding from the callous walls of a former grangrenous cavity; but there are no signs of further infiltration, and the case seems likely to terminate well.—*Dublin Hospital Gazette.*

Spasmodic Tic (?) in new-born Infants. By Alfred H. M'Clintock, M.D.—The diagnosis in these cases lay between paralysis and spasmodic tic, an affection so designated and first described, I believe, by Marshall Hall, and which Romberg calls "mimischer gesichtsschmertz"—a term which his translator, Dr. Sieveking, thus renders: "histrionic spasm of the face." The symptoms, carefully weighed and considered at the time, inclined me, and two very competent observers who saw these cases along with me, to the opinion that they were not examples of ordinary facial paralysis. Be this point as it may, however, they are still highly interesting, and have a direct bearing upon the subject of nervous pathology.

Case 1.—Mrs. B. was delivered of her first child after a rather protracted labor. Ergot of rye was administered towards the conclusion, as the pains were very inert; the child, a well grown boy, was still-born, but by the employment of the ordinary restoratives was completely resuscitated. The next morning it presented the following appearances:—Upon the occiput and posterior part of the *right* parietal bone was a tumor, such as is commonly found after tedious labors. On the *left* side of the head, and corresponding to the temporal ridge, was a superficial yellow slough, about an inch and a quarter in length, surrounded by an inflammatory margin. As long as the child was at rest, no change in the features or symmetry of the face was observable; both eyes opened and closed nearly alike, at least, when in the former state, the lids of the right were, perhaps, a degree farther apart than those of the left. When the facial muscles were called into action, great distortion resulted on the *left* side—the corner of the mouth and *ala nasi* being drawn up and the eye tightly shut; at the same time, the right side of the face was not utterly blank and void of expression, as we see it in paralysis. Local treatment was applied to the injury on the left side of the head, and in the course of a few days the wound put on a healthy appearance, and healed rapidly. A considerable improvement also took place in the distortion of the countenance, and at the end of a fortnight, when the child ceased to be under observation, scarcely any difference existed between the two sides of the face.

Case 2.—A woman was delivered, after twenty-four hours illness, of a fine healthy boy. At next visit the nurse called my attention

to the child's face, which on a first glance, seemed paralysed on the *right* side; a more careful scrutiny, however, altered this opinion. During the quiescent state of the features, no difference was discernible between the right and left sides; but when the child laughed or cried, then the muscles of the *left* side were thrown into strong action, and considerable distortion ensued. From the close similarity in the symptoms with those of the former case, I was lead to examine the child's head: a small grey slough, surrounded by inflammation, was discovered on the integument covering the *left* parietal bone, near its anterior inferior angle. The treatment employed was purely local, and in the course of some days the facial muscles acted with undisturbed harmony.

Paralysis of one side of the face, apparently from compression of the *portio dura* in labor, has been frequently noticed. Osiander,* Landouzy,† and Evory Kennedy,‡ have each met with, and recorded examples of this. In all such cases the paralysis was, of course, on the same side with the injury. Now, in the foregoing cases, the reverse was the fact, the seeming paralysis being on the side opposite to the injury. This circumstance, taken *per se*, is certainly not of any positive value as disproving the existence of paralysis (though it may serve to account for the opposite condition); but setting it aside altogether, and confining our attention to the *right*, or apparently palsied half of the face, certain peculiarities were observable, unlike what is ordinarily seen in paralysis of the muscles supplied by the facial nerve, and tending to suggest doubts as to the actual presence of any such condition. For example, each patient had full command over the orbicular muscle of the right eye; in one instance, certainly, this eye was slightly more open than its fellow, but there was no other evidence of any impairment in the motor power of the orbicularis muscle. Again, in smiling, laughing, or crying, this same side did not at all present that blank, expressionless appearance which is so characteristic of a paralysed condition of the facial muscles; on the contrary, it struck us, on the moment, that the partial want of animation in this half of the face was owing to the undue and preponderating action of the muscles belonging to the other half. Subsequent and more mature reflection inclines me to think that this opinion has some foundation in facts, and is sustained by analogy, and I have headed this communication accordingly, as some denomination should be given to it; but I am far from asserting dogmatically that the *right* name has been selected. It is to be regretted that these cases were not reported more in detail, seeing that they involve so delicate a point of diagnosis; but, in fact, they occurred when I was assistant at the Lying-in Hospital, and I merely noted down, at the time, the salient features of each case. By a curious but not uncommon sort of coincidence, they presented themselves to my notice within a few weeks of one another, and no additional instance, of a similar nature, has since come under my observation." *Dub. Hos. Gaz.*

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* *Handbuch der Entbindungskunst.* Vol. ii.

† *Brit. and For. Med. Review.* Vol. x.

‡ *Dub. Medical Journal.* Vol. x. (Old Series).

Gallic Acid in cases characterized by Excessive Secretion. By W. Bays, M.D.—It is obvious, that while in some cases excessive secretion is in itself a diseased action, that in others it is an effort of Nature to cast out some poison or peccant matter circulating in the blood, and therefore curative. We have examples of the former in pyrosis, and of the latter in the sweats of rheumatism, in the diarrhœa which precedes erysipelas, and some other disorders, and which proves critical in some fevers. Still, after rejecting all these as unfit cases for the exhibition of gallic acid, a large number yet remain, in which excessive secretions result from debility, or a generally relaxed state of their natural organs, or of the capillaries of the parts whence they are excreted. Where this obtains, there is certainly no remedy which acts more pleasantly and admirably than gallic acid, giving, as it does, general tone and vigour without the slightest tendency to induce febrile excitement. In pyrosis, where this disease is unaccompanied by extensive ulceration, or organic malignant disease of the stomach, or by disease of the liver, the most marked benefit will follow the use of the remedy. Gallic acid, here, not only checks the secretion with a certainty and rapidity I have never seen follow the administration of any other remedy, but it gives general tone to the stomach, increases the appetite, and (what I very little expected when I first used it) in many cases removes constipation. This I can only account for on the supposition that the relaxed atonic state of the stomach which favors pyrosis is continued throughout the alimentary canal, the constipation in these cases arising from want of power in the muscular coats of the intestines to expel the fæces. This want of tonicity is remedied by galic acid. The cases of pyrosis which have fallen under my observation, since I have adopted the gallic acid treatment, have been very few; indeed I believe it to be a very infrequent form of disease in Brighton. Out of 945 cases of general disease, which have come under my care at the dispensary during the past twelve months, only eight patients have suffered from this disorder. These have been all females. I have the notes of five of these cases before me. The first was a female of twenty-five years of age, unmarried; she had been for eight months suffering from pyrosis and obstinate constipation, during which period nearly every remedy of reputed value had been administered. She was completely cured in two days. I kept her under my care for three weeks, continuing the gallic acid and occasional doses of castor-oil. I have seen her since, and though some months have elapsed, she has remained perfectly well. The second case was a female, forty-nine years of age. The pyrosis ceased after the second dose of the medicine. She discontinued the treatment a week afterwards, and had a slight return the following morning, which again gave way to the medicine, and by a continuance of the pills for three weeks she has remained perfectly well ever since. In the third case, the remedy proved equally successful. In the fourth a married woman of thirty-five, who had suffered from the disease nine months, this distressing symptom abated considerably at the fourth day, and entirely left her on the eighth day. In the fifth case, a female of forty-five, there was no return after the first dose. In one case only have I found it fail,

and this woman is still under my care; she is forty-nine years of age, and is, I fear, the subject of malignant disease, together with organic disease of the liver. All the first five cases presented a general similarity in the relaxed muscular fibre of the body, and pale watery appearance of the mucous surfaces. In diarrhœa and dysentery, after the removal of any irritant matter by a gentle aperient, I have found the diseases yield, and a healthy tone easily restored to the intestinal membrane, by moderate doses of gallic acid every two or four hours, with a teaspoonful of castor-oil every morning. There is a class of phthisical cases to whom gallic acid is an almost inestimable boon. I allude to those in whom the expectoration is frequently tinged with blood, and who no sooner appear to improve a little in general health and strength, than slight hæmoptysis recurs and again reduces both. I have at this time several such cases under my care, who are improving slowly yet steadily under five-grain doses of gallic acid taken three times daily, in conjunction with cod-liver oil and other remedies. In one of these cases the man has been now under my care for twelve months. When I first saw him, he was reduced almost to a last extremity by the constant hæmoptysis and profuse expectoration, and suffered so greatly from dyspnœa as to be unable to follow his occupation (that of a painter). Three vomicæ have discharged themselves since he has been under my care, and yet he is improving, and has for the past ten months been able to resume his business, and to continue it all through the winter, and can walk up hill or mount stairs without much distress. While he continues both cod-liver oil and gallic acid, he does well; if he leaves off the one, his hæmoptysis returns; or if he discontinues the other, he becomes weak and languid. Gallic acid is also valuable in conjunction with the oil, in enabling the stomach to bear it without nausea. Another great benefit to phthisical patients from the exhibition of gallic acid is the tone it imparts to the stomach, restraining the inordinate appetite and promoting its power of digestion. The stomach is often greatly enlarged in this disease, and its coats relaxed and atonic, hence the benefit alluded to. In the distressing night-sweats and diarrhœa which characterize some stages of phthisis, the remedy, though of the utmost service, requires a nice discrimination in its use. It must be commenced in small doses and carefully increased, since the cough will be aggravated materially if the secretions be too suddenly suppressed. But if gradually increased doses be given, I have found that not only are the sweats and diarrhœa moderated, but that the breathing becomes more easy, the expectoration causes less effort, and the digestion greatly improves. The reason of this varied improvement easily appears, if we bear in mind the single action of gallic acid, its solubility and entrance into the blood. It contracts the capillaries and glandular apparatus of the alimentary canal. It contracts their walls, and diminishes their general calibre. It gives the same power of contraction to the elastic and muscular tissues of the lungs, thus enables them to expel accumulations of mucus or pus, and it produces the same action on the skin, enabling it to check the exhausting exudation from its surface. It is evident while contemplating these various demonstrations of the power

of the remedy, that in order to produce benefit in phthisis, they must be only gradually brought to bear on the secretions, and that great care must be exercised lest too sudden an impression be produced. In chronic bronchitis the same caution must be used in checking the profuse expectoration, but I know no remedy more easily managed than gallic acid, and none so calculated to permanently arrest the diseased secretion, and to restore tone to the bronchial tubes and their lining membrane. I ought parenthetically to observe that I have always found that penciling the tonsils and uvula with a solution of nitrate of silver (of from five to ten grains to the ounce) night and morning, greatly assists in relieving the cough both of phthisis and bronchitis. The dose I have given in these cases has been from five to ten grains ter die. In diabetes we should expect some benefit from gallic acid.—*Assoc. Med. Jour.*

Failure of Male Fern and Kousso in the Treatment of the Tape Worm.—The following remarks are appended to the histories of several cases in the *Edinburgh Monthly Journal*, in which extract of male fern and kousso failed to dislodge the tape-worm, by GEORGE PATTERSON, M.D.—1. It would appear from the above cases that the kousso and œtherial extract of male fern, are, like all other remedies that have hitherto been prepared for tape-worm, liable to, at least, occasional failure. At the same time it is certain, from the effects that followed upon their administration in these instances, that they are remedies of great power, very obnoxious to the parasite, and therefore valuable additions to our means of treatment.

2. I should be disposed to believe from what was observed in these cases that the same remedy is not suited alike to every case; but that in one subject the kousso, in another the male fern, and in another the turpentine will be found to be the most appropriate remedy. Thus, in the second case, neither the male fern nor the kousso brought off any of the worm, while turpentine invariably did so. In the first, on the contrary, turpentine and castor-oil were repeatedly given before the male fern, without having the least effect. Again, we sometimes find the worm, not only detached and dislodged, but carried downwards and expelled by the male fern and kousso, unaided by any purgative; while at other times they require to be followed by the administration of a purgative dose. As to the comparative energy of the kousso and male fern, it would appear from the above cases (in which both were successively given to the same person) to be nearly equal, and in the phenomena attendant upon their operation both remedies are very much alike.

3. The first of the cases I have narrated is in many respects a remarkable one. It furnishes a striking portraiture of the symptoms of the disease in a very aggravated form; and the immense number of joints that were discharged at various times, both singly and in pieces of several feet in length, would seem to indicate either that there must have been more than one of the parasites in the man's body, or else that it is capable of reproduction and of attaining its for-

mer growth in an incredibly short space of time after large portions of it had been detached.

4. The same case affords an instance of the worm finding its way into the stomach, portions of it being stated to have been brought up by vomiting in round balls. This is a more common occurrence with other kinds of intestinal worms. Thus I have met with several instances, both in children and adults, where lumbrici have escaped by the mouth or nose. In one case of an hysterical and hypochondriacal female the circumstance of one of these worms having escaped by the mouth produced an impression that she still had one in the windpipe. The sensation, which was partly hysterical and partly perhaps due to an enlargement of the thyroid body, led to continual efforts to bring up the worm and dislodge it with the finger, which necessarily produced increased local irritation, and the failure of which aggravated her despondency and low spirits. She vainly resorted to several medical men, including myself, for relief—neither reasoning nor such remedial measures as the nature of the case suggested having succeeded in overcoming the delusion.

5. In the second case we have an instance of the co-existence of another kind of worm with the tape-worm. This is worthy of notice, principally as showing (what has been pointed out by Dr. Watson and others) that the term "solitaire," which some French writers have applied to this worm as a distinguishing characteristic, is not correct.

6. Besides the above three cases falling under my own notice in the course of a few months, I have heard of another instance under the care of one of the medical gentlemen of this town, in which the kousso brought off several yards of a tape-worm, but equally failed to eradicate the disease. One would be almost disposed to argue, from so many instances of a somewhat rare affection observed within a short period among persons, the majority of whom are natives of the place, that the disease is more than usually common in this locality. On inquiry, however, among the oldest practitioners of the town, they inform me that this is by no means the case, and that whatever fortuitous circumstances may have concurred to multiply instances within so short a period, their experience of such cases is not larger than that of the generality of medical men in other places.

Cardiac Murmurs without Valvular Deformity.—At a recent meeting of the Medico-Chirurgical Society of Edinburgh, Dr. W. T. Gairdner stated that the result of his inquiries on this subject were as follows:—1. It is impossible in the dead heart to imitate precisely the physiological conditions of the closure of these valves, so as to prevent reflux. The nearest approach to these conditions is when water is injected, with moderate force, into a ventricle in a state of tonic contraction. The slightest amount of relaxation in the muscular fibre of the dead ventricle determines regurgitation. 2. On the right side (as was observed by Hunter and Wilkinson King) regurgitation is more certainly and more freely produced in experiments on the dead heart than on the left. The chief reason of this difference, however,

is the usual absence of rigid tonic contraction after death in the right ventricle, and the greater readiness with which its thin walls yield to distention. No argument can be drawn from this difference, as to the existence of a " safety-valve function " in the living and healthy heart. 3. The impossibility of securing in the dead heart the physiological conditions of closure in the living, together with other considerations derived from the structure of the valves, prove that a certain amount of tension must be exercised upon the tendinous cords, through the muscular structures of the ventricle, before the counter-pressure of the blood upon the valves can be exerted so as to close them against regurgitation. 4. Too great tension is fatal to the closure of the valves, as well as too little; and there is reason to think that the columnæ carneæ are so disposed as to maintain, by a very beautiful and delicate adaptation, a nearly uniform state of tension of the valves throughout the contraction of the ventricle. 5. Not only must a graduated tension be exercised upon the tendinous cords, but the columnæ carneæ must be approximated at their bases, so that the whole of the tendinous cords act, as it were, from one point in the centre of the ventricle, towards which all the edges of the valvular fringe are drawn. Thus the cylindrical curtain, which hangs from the auriculo-ventricular opening during the diastole of the heart, is converted (as Bouillaud has correctly pointed out) into a cone with the apex downwards; and the counter-pressure of the blood upon the under surface of this conical curtain brings its edges into apposition, and completely closes the valve against regurgitation. 6. To sum up the physiological conditions of closure of the auriculo-ventricular valves: it is indispensable, *a.* That they shall be acted on by the columnæ carneæ, and kept thereby in a certain state of tension; *b.* That the counter-pressure of the blood shall then come into play, and float the valves upwards towards the openings which they are destined to cover; *c.* That the forces *a* and *b* shall be simultaneously exerted on the valves when in a favorable position for complete closure: *i. e.*, with the columnæ carneæ and chordæ tendineæ massed together, and the free edge of the valve drawn towards the axis of the opening. 7. All these conditions may be shown to concur in the systole of the healthy heart. 8. The condition *a* is vitiated to a greater or less extent by disease or degeneration of the columnæ carneæ or chordæ tendineæ; also by great hypertrophy or dilatation, and more particularly by hypertrophy with predominating dilatation of the ventricles. In certain cases of simple hypertrophy, however, with inconsiderable dilatation, the increase in size affects all the structures *pari passu:* and in these it may happen that the valve preserves its normal relations by the elongation of the tendinous cords and muscular columns. 9. The condition *c* is vitiated whenever dilatation predominates largely over hypertrophy; for then the contractions of the ventricles are inadequate to bring the columnæ carneæ together at any period of the systole; they remain therefore permanently apart, and the tendinous cords instead of drawing the edges of the valves *towards* the axis of the opening, may actually cause them to diverge from it. It is unnecessary to do more than point out that sacculated aneurisms of the ventricle, globular

polypi between the columnæ carneæ, and other morbid conditions, may produce a like result.—*Edinburgh Monthly Journal.*

SURGERY.

On the propriety of opening the Bowels soon after the operation for Strangulated Hernia. By J. S Gamgee, Esq.—The various conditions in which we find cases of hernia at the time of operation, admit of their arrangements under four heads. 1. Those cases in which the intestine is in good condition, and inflammation has not yet manifested itself; 2. Those in which, though the bowel is in very fair condition, there are local and general signs of a moderate amount of peritonitis; 3. Those in which the bowels are notably discolored, but of good consistence; peritonitis being intense; 4. Those in which there is threatening gangrene of the gut.

Let us consider the first class of cases. Since it is reasonable to suppose that in a case of strangulated hernia that has been operated upon, a part at least, of the uneasiness dependent upon the intestinal function is immediately due to its restoration, we should in this class of cases theoretically be disposed to promote the action of the intestines, when it does not occur spontaneously, a short time after the constriction has been removed. Such practice seems the more reasonable, in that there can be no fear of aggravating inflammation which does not exist, and in that there is reason to believe that the expulsion of the accumulated fæces is tantamount to the exclusion of a possible, if not probable, cause of inflammation.

In the second class of cases, the first part of the argument used above applies, but not the second; for inflammation exists, and the question arises, whether the administration of purgatives, theoretically indicated by the necessity of restoring the intestinal functions, may not be productive of evil by aggravating the inflammation. From what I have seen, however, these fears would not disquiet me. I think there is more chance of the progress of inflammation being checked by the expulsion of irritating fæces, and restoration of the gut to its function, than of its being aggravated by the stimulant action of the purgative.

In the third class of cases, in which the bowel is in moderate condition, but the peritoneum intensely inflamed, it is reasonable to believe that the constipation, although in great measure dependent upon the atony which has resulted from long inactivity, is likewise due to the disturbance of innervation incident upon the inflammation. It seems hence prudent to respect the objections of those who allege that the inflammation may be aggravated by purgatives; but while antiphlogistics are being actively employed, there is no reason for objecting, if the bowels do not act, to enemata; the probabilities of their doing good are much greater than those of their possible perniciousness.

In the fourth class of cases, (threatening gangrene of the intestine,) inasmuch as there is more to fear from the action of the intestines, though it be but moderate, than from their inactivity, though it be extreme, enema and purgatives appear contra-indicated so long as there is reason to fear disorganization of the gut.

From the foregoing considerations, flow three rules for practice, in cases in which the operation of herniotomy is not followed by spontaneous action of the bowels.

1. When the condition of the gut is good and there is little or no peritonitis, an oleaginous enema should be given an hour or two after the operation, and repeated after three or four hours in case of failure, or a purgative exhibited by the mouth.

2. When the peritoneal inflammation is intense, even though the bowels be in fair condition, antiphlogistics must be perseveringly employed; and though a simple enema may be given in the first six hours, it is inadvisable to excite the action of the bowels until the next day, either by more active enemata or purgatives by the mouth.

3. In the case of mortification threatening the gut, the bowels should be kept quiet by opium, and purgatives and enemata abstained from until the danger of perforation has passed.—*Assoc. Med. Jour.*

Periodical Hæmorrhage after Surgical Operations.—M. Bouisson, of Montpellier, has brought prominently forward the fact that distinctly periodic losses of blood are occasionally met with as one of the forms of hæmorrhage after surgical operations; and that this intermittent form of hæmorrhage must be carefully distinguished from other kinds dependent on local accidents or conditions of the wound, on particular states of the blood or circulating system, on arrest of any ordinary discharge, either catamenial or hæmorrhoidal, or on physical or moral excesses. The previous abode of the patient, in a malarious locality, the regular periodic character of the hæmorrhage, the co-existence of a certain amount of febrile disturbance, and the occurrence of the bleeding at the *crisis* of the attack (as it were, as the substitute for sweating,) are the principal grounds on which we may diagnosticate this form of consecutive hæmorrhage. In certain cases all these conditions are fulfilled; but in a few, M. Bouisson believes that the intermittent character only is to be detected, there being no regular febrile access, just as we observe in the masked fevers, or *fièvres larvées.* Finally, the most interesting fact connected with these periodic hæmorrhages is, that they yield positively and promptly to full doses of quinine, even when other internal treatment, as by astringents, has apparently failed. M. Bouisson remarks that this periodic hæmorrhage from *wounds* after operations, has received little attention from surgical observers, probably owing to its rarity, except in localities prone to the development of malarious influences. In his special "treatise on periodic diseases without fever," M. Casimir has mentioned periodic bleedings from mucous surfaces, but not from wounds. Professor Sanson has briefly alluded to periodic secondary hæmorrhages, deriving his knowledge also from observations in Montpellier. Besides this nothing but scattered allusions to the subject exist in surgical literature.

The special cases brought forward by M. Bouisson may thus be analyzed. They are four in number—viz., an amputation of the great toe, in a girl 18 years of age; amputation of the leg in a male aged 36 years; amputation of the thigh in a male of 21 years; and re-

moval of the forefinger, with its metacarpal bone, for encephaloid disease of the latter, in a female aged 34.

As to the influence of locality, the first patient came from the neighborhood of Arles, in which intermittent fevers are so common. The second was placed in a particular ward of the Hospital Saint Eloi, in which intermittent fever often made its appearance amongst the patients. No special local circumstances could be traced in the third and fourth cases. The periods at which the hæmorrhage began in each case, the number and dates of its recurrences, and the mode in which it was apparently affected by the administration of quinine, were as follows: In the first case, it began on the evening of the fifth day after the operation, before any ligatures had come away; it recurred at the *same hour* on the sixth and seventh days; during the early part of the eighth day, 10 grains of the sulphate of quinine were given, and the bleeding never recurred. In the second case, the hæmorrhage first happened on the ninth day after amputation, no ligature being loose; it recurred at the same hour on the following day; on the eleventh day, 12 grains of quinine having been irregularly given, it again happened at the usual hour, but in more moderate quantity; on the next day, the remedy being persevered in, it ceased. In the third case, the hæmorrhage began on the evening of the eleventh day, and recurred at the same hour on the thirteenth and fifteenth days, missing the intermediate days. It was diminished on the fifteenth day by 10 grains of sulphate of quinine, and arrested entirely by its repetition on the seventeenth day. Powerful astringents had been first tried. In the fourth and last case, the first hæmorrhage took place at seven o'clock in the morning of the fourth day after the operation; it was renewed at precisely the same hour on the fifth. Quinine being administered, it did not happen on the sixth day; but the patient having then neglected to take that medicine, a fresh bleeding happened at seven in the morning of the seventh day; but by subsequent attention and an increase of dose, further bleeding was arrested. In all four cases, great care was taken to determine that the hæmorrhage was a general oozing, and not from any particular vessel. Sometimes even compression was employed, but without success. In all cases, the quinine seemed alone to arrest the hæmorrhagic attack; and its use was invariably continued for some days after the bleeding had ceased. As to the general symptoms accompanying the attacks of bleeding, they were, in the first and second, well-marked, consisting of a cold and then a hot stage, at the height of which the bleeding occurred. In the third case there was no cold stage, but merely a slight febrile accession. In the fourth example no general disturbance at all was manifest: the remarkable periodicity of the attacks alone serving as a guide in the diagnosis and treatment.

M. Bouisson refers generally to other cases, collected from the clinical records of Montpellier. It is proper to add that he by no means neglects the ordinary rules of treatment in cases of consecutive hæmorrhage. That an intermittent or periodic consecutive hæmorrhage from the general surface of the stump occasionally happens—that its cause is constitutional and similar to that which gives rise to

intermittent fever—and that it yields promptly to quinine—are conclusions to which M. Bouisson's observations irresistibly lead. Whether the bleeding is to be regarded, as he believes, as the substitute for the ordinary critical discharge—of sweating—and whether a periodic hæmorrhage without febrile disturbance is truly analogous to the masked fever, are points perhaps for further investigation. We commend the subject to our surgical friends living in malarious districts. —*Medico-Chirurgical Review.*

Operation of opening the membranous portion of the Urethra in Retention of Urine from enlarged or diseased Prostate. By James A. Lawrie, M.D.—The cases in which it is impossible, without force, to pass a catheter into the bladder, in retention of urine from enlarged prostate, although not numerous, constitute in my experience the greatest number of examples of impossible catheterism. I have met with three such: one in hospital practice, ten or fifteen years ago; a second, in private, three or four years ago; and a third, in private, in the course of this summer. The first was punctured above the pubes, in my temporary absence, by my friend and colleague Dr. Buchanan; the second I punctured above the pubes; and the third I relieved by the operation I am about to describe. All proved fatal. Practical writers, in describing the methods of reaching the bladder in cases of impossible catheterism from diseased prostate, allude, as far as I know, to two methods only—puncture above the pubes, and forced catheterism through the prostate gland. Both are objectionable; the first is almost always a fatal operation, and the second sometimes causes dangerous hæmorrhage, or may condemn the patient to the uncertain use of the catheter for the rest of his life. Besides which, it is at times impossible, as happened in a case in the infirmary here several years ago, in which every catheter tried, bent in the forcible attempts made to thrust it into the bladder.

So far as I know, no proposal to puncture through the perineum in this class of cases has yet been made. Sir B. Brodie says, "it will be of no service here . . . to make an opening into the urethra beneath the pubes." With all deference, this is the very operation which will be of service—it is one which I have taught for many years in my lectures, and which it is the object of this notice to recommend to my professional brethren. I shall describe the operation, and add a case in which it was performed. The instruments required are, a common curved or rectangular lithotomy staff, a sharp-pointed bistouri, or lithotomy knife, and a straight metal or elastic catheter. Before Dr. Buchanan invented his rectangular staff, I used the common curved staff, grooved on its under surface; but now I greatly prefer the former, taking care that the under limb of the instrument is not too long. The patient being placed and tied as for lithotomy, the staff is introduced and held as for lithotomy—*i. e.*, pushed down upon the rectum, and the angle made to project towards the perineum. The point of the staff ought merely to reach the apex of the gland, or pass about half an inch into it. Hence the necessity for having the under portion of the staff short. The urethra is now to be

opened by thrusting the knife into the groove of the staff, not deeper than merely to make sure that the canal has been opened, and immediately withdrawing it, making an incision just large enough to admit the finger. The finger being placed in the wound, a straight metallic catheter is introduced into the urethra, and lodged in its membranous and pervious prostatic portions. The staff is now withdrawn, and we have a straight catheter in a short straight canal, which a little gentle manipulation enables us to lodge in the bladder and relieve our patient. As it is of importance to have a thorough command of the catheter, I use one twelve inches long, slightly curved, and perforated at the point; the slight curve enables us to glide it under the arch of the pubes, and over a projecting third lobe, while the perforation at the point allows us to withdraw it over the probed wire, and to lodge and retain in its place a short elastic tube. The following will show that the above proposal is not merely theoretical.

Case.—Some weeks ago I was asked to see, in consultation, a gentleman upwards of 80, and found him labouring under retention of urine of several hours continuance. Before my arrival, a common sized catheter seemed to have reached the bladder, but gave vent to blood only. Not having a prostatic catheter with me, and urgent engagements calling me elsewhere, I was obliged to defer farther attempts till the evening, when I completely failed to empty the bladder. As it was now late, and the patient was a little way out of town, it was agreed that I should return at six in the morning, and, if possible, reach the bladder by incision. I took Dr. Buchanan with me, who tried the prostatic and his compound catheter without success. I immediately performed the operation as above described, and with the utmost ease, and by the simplest possible operation, drew off a large quantity of bloody urine. The relief was great, but only temporary; the old gentleman sank, and died in about twenty-four hours.

Want of success, in this case, does not militate against the operation. Every thing was against it—the great age of the patient, the previous repeated attempts to introduce catheters, the loss of blood from the urethra and prostate, and exhaustion, made recovery all but impossible. In similar cases, let careful, but not too frequent, attempts be made to pass the prostatic catheter, and if these fail, let the urethra be opened *at once* in the manner recommended, and I have no fear of the result.—*Glasgow Medical Journal.*

Surgical Removal of Opacities from the Cornea.—M. Szokalski contributes to the *Revue Médico-Chirurgicale* a *compte-rendu* of thirty-two cases in which he has practised this operation. He performs it by scraping the cornea with a delicate knife, as we scrape paper to remove ink marks from it. The epithelium of the cornea adheres pretty firmly in all cases, but, when opaque, is often so tough that it cannot be removed at one sitting. The proper substance of the cornea is still more difficult to remove; in fact, the author considers that, when it yielded to his mode of treatment, the success was owing, not to mere mechanical abrasion, but to the process of absorption set going by the irritation which the operation produces. This sounds like common

sense, and at the same time goes far to invalidate M. Szokalski's own results, and to induce the prudent surgeon to trust to gentler means of stimulating the absorptive process. These we see wonderfully efficacious in cases of which we might at first despair. Much, however, as all practical oculists know, depends upon the age of the patient. In infants, we never despair, though the cornea be apparently quite opaque, so wonderful are the cures which nature sometimes effects; and M. Szokalski's neglect to notice the age of those on whom he operated, renders his results much less useful than otherwise they might have been.

Of the thirty-two eyes, the authors reckons fifteen successful, and eight partially successful operations. In five cases, there was no change effected, and in four the occurrence of inflammation rendered it necessary to stop the proceedings. Of the fifteen successful cases, there were eight in which the opacity was limited to the corneal epithelium, five in which it affected the superficial layers of the cornea proper, and three in which it was deeper still, as it was in all the eight partially successful cases. Thus, taking into consideration the remarks we have already made as to the spontaneous disappearance of opacities in young subjects, and our author's own admission as to the *modus operandi* of his process in the case of the deeper albugines, we do really think that the use of stimulating collyria, etc., and *time*, would have produced results as favorable as his. Again, he states that three of his total failures were cases in which the opacity was merely nebulous and superficial; and, above all, the *accidents graves* which happened in four cases, were of the most serious description. He states that, when inflammation does occur as a consequence of these proceedings, it always affects, not the conjunctiva, but the iris and other internal parts of the eye, and may terminate in complete destruction of the globe! Our conclusion is, that the operation is not to be recommended, *except* in occasional cases, where the opacity fails to yield to judicious treatment of the ordinary kind, continued for many months, where it is dense enough to render the eye useless, where the other eye is also blind, and where the formation of an artificial pupil is out of the question. One remark of the author we may quote—that his scraping process is much more likely to produce inflammation when carried on near the circumference of the cornea. This is so far fortunate, since it is precisely in that part that opacity of the cornea is of least consequence.—*Assoc. Med. Jour.*

Amaurosis from Suppressed Secretion.—M. Duval, in the *Gazette Médicale* for May, records several cases of amaurosis, following suppression of habitual perspiration from the feet, and evidently depending on congestion of some part of the organ of vision, so induced. The cure was effected by maintaining the warmth of the feet by various appropriate means, (among others, filling the stockings with flour of mustard and powdered sal ammoniac!) and by a course of alterative purgatives and mercurials.

DISEASES OF FEMALES.

The Use and Abuse of Potassa Fusa and Potassa Cum Calce in the treatment of Uterine Diseases. By HENRY BENNET, M.D.—More than nine years ago, Dr. Bennet first introduced potassa fusa and potassa cum calce as valuable agents in the treatment of uterine inflammation. They had since been used by many practitioners; but, he believed, not always with the caution which was imperatively required; and he was therefore anxious to lay down, even more carefully than before, the rules which ought to be attended to in resorting to so powerful an agent. He had obtained cylinders of potassa cum calce, in the proportion of two parts of potash to one of lime, which did not deliquesce, and were nearly as manageable as nitrate of silver, and therefore free from many of the objections urged against potassa fusa. The conditions of local uterine disease in which he considered that caustic potash, or the actual cautery was applicable, were the following: Chronic inflammation or inflammatory ulceration of the mucous membrane covering the cervix, or lining its cavity, intractable to other treatment; chronic inflammatory hypertrophy of the cervix, also intractable to other means; and lastly, chronic inflammation of the body of the uterus, in which form of disease the potash is merely applied to the cervix to produce a derivative issue, as we would apply an issue to the back in disease of the spine.

In the first class of cases, the caustic potash is used to modify the morbid vitality of the diseased tissues, and to substitute a healthy reparative action. In cases of hypertrophy, the elimination of a moderate sized eschar on the enlarged cervix is attended with acute congestion or inflammation of the subjacent hypertrophied tissues; and under its influence the latter soften and melt, as it were, or are absorbed. The object was not to destroy the enlarged cervix, but to procure its absorption. When applied to the cervical canal, the caustic potash reached the mucous follicles concealed between the rugæ of the *arbor vitæ*, which are occasionally the seat of chronic inflammation, and resist every other means of treatment. Although caustic potash was one of the most valuable contributions ever made to uterine pathology, Dr. Bennet considered it an *ultima ratio*, a last resource, only to be employed when all other means of treatment, general and local, had failed. If used cautiously, there was no danger whatever incurred by the patient; but if incautiously or imprudently employed, serious results might follow. The inflammation produced in the cervix might pass to the uterus. The vagina had also been compromised by the extension of the caustic; and in several cases, the potash having been employed too freely to the cervical canal, the os or canal had been nearly obliterated by subsequent contraction and adhesion of its parietes. To prevent these accidents, he advised practitioners never to attempt to destroy the hypertrophied cervix, as had been proposed, but to be satisfied by producing the eliminatory inflammation already described, to use the potassa cum calce cylinders which do not deliquesce; and when the potassa is applied to the cervical canal, to apply it very gently, and to pass a bougie through the canal once or twice a week for six weeks. Dr. Bennet never resorted to this treat-

ment in passive hypertrophy, either of the cervix or uterus, which he thought might be left to nature, time, and general treatment. It had been often stated that the use of caustic potash to the cervix left indurated cicatrices, which might impede subsequent labors. This was by no means the case. So far from producing induration, this mode of treatment removed it, and facilitated parturition. Indeed, he was becoming more and more convinced of the truth of a statement he had made many years ago, that rigidity of the os in labor was nearly always the result of previous inflammatory diseases.—*Lancet.*

Incision of the Cervix Uteri in certain cases of difficult labour.—A rigid condition of the os and cervix may prove so formidable an impediment to labour as to justify incisions. This occasionally happens when the parts are in a healthy state; but it occurs more frequently from the existence of malignant induration. Incisions may also be made with propriety when the os is undilated and it is necessary to apply the forceps, in consequence of the head of the fœtus being retained in a transverse position at the superior strait of the pelvis. In such circumstances it cannot affect by its pressure the natural dilation of the cervix. The two following cases (reported in the *Journal de Méd. et de Chir.* for March, 1854), which illustrate the advantages of incision of the cervix in each of the conditions referred to, occurred lately in the practice of M. P. Dubois, at the Hôpital de la Faculté.

Case 1.—On the 13th Feb., at 2 A.M., a woman at the full term of her pregnancy was taken with labour pains. On the 14th, at 2 P.M., dilation of the os was complete. She continued to suffer on the 15th; and on that day, at 10 A.M., M. Dubois found the cervix stretched, and an annular stricture causing an evident impediment to the spontaneous termination of labour. Two incisions were made in the opposite sides of this ring by means of a probe-pointed bistouri (*bistouri boutonné*), and shortly afterwards the child was expelled.

Case 2.—On the 17th Feb., a woman with a deformed pelvis could not bring forth in consequence of the head of the fœtus occupying a transverse position at the superior strait of the pelvis. Death of the fœtus being imminent, M. Dubois incised the cervix right and left, and being thus enabled to apply the forceps, extracted a child, which was well formed and full of vigour.

In incising the cervix, it is perhaps safer to operate with blunt-pointed scissors guided upon the finger, than with the probe-pointed bistouri; but if care be taken, either instrument may be used. It is important to remember, as was above remarked, that the incisions ought to be made in a lateral direction. In this way the bladder and rectum are not placed in jeopardy of being injured by an extension of the incisions, incident to tearing during the expulsion of the fœtus. When the womb is affected with cancer, there is always some danger of the incisions of the neck being extended by a rending process into the body of the organ; and therefore in such cases special caution is required.—*Lancet.*

THERAPEUTICS.

Chloroform Vapor in Tenesmus.—Ehrenreich relieves the tenesmus of dysentery by the vapor of chloroform passed into the bowel through a syringe and common canula.

Belladonna in Salivation.—Erpenbeck used the extract of belladonna gr. ij ss. in an emulsion in 24 hours with perfect relief.

Sciatica.—Trousseau inserts a medicated pea over the nerve composed as follows: ext. opium and belladonna aa grs. xxxvi. pv. guiaic and mucilage q. s. for 20 pills. When these pills are dried and covered with fine powder of guiaic, they become as hard as wood.

Glycerine in Dandriff.—Mr. Shaw of Middlesex Hospital, uses glycerine in ptyriasis of the scalp, in the form of an oil mixed with an agreeable perfume.

New Salt of Quinine.—Bartella, an Italian physician, speaks highly of the sulpho-tartrate of quinine, which he obtains by combining equal parts of the sulphate of quinine and tartaric acid; it is much more active requiring but half the dose of the former.

Pitting in Small Pox.—Dr. Hughes Bennett recommends the frequent application of the following preparation to prevent pitting in small pox: carbonate of zinc, three parts; oxide of zinc, one part, rubbed with olive oil to a proper consistence.

Hæmorrhage in Carcinoma Uteri.—Remilly arrests the hæmorrhage by injecting every five minutes perchloride of iron 15 parts to 250 of water.

Turning.—Dr. Snow remarks, that nothing so much facilitates turning of the child, when the parts have become wedged as the inhalation of chloroform.

Quinine in Urticaria.—Mr. Startin gives quinine as follows: quin. disulph. gr. xij; ammon. sesquicarb. ʒ j; magnes. carbon. ℥ ss; aquæ ℥ viij; fiat mist. ℥ ss ter die sumend.

Nævus.—Dr. Cumming advises to apply a compound of 15 grains of tartar emetic to ʒ i of galbanum plaster on a piece of thin leather, cut accurately to the size of the tumor. Inflammatory action is set up and the vessels obliterated.

Phthisis, Diarrhœa of. Dr. T. Thompson.—Give five grains of trisnitrate of bismuth combined with three grains of gum arabic, and two of magnesia, every four or six hours.

Night perspirations of.—Give four grains of oxide of zinc, and four grains af extract of hyosciamus, made into two pills, every night for a time.

Compression of Arteries in Neuralgies.—Allier reports a case of long-standing neuralgia of the orbito-frontal nerve cured by compression of the carotid of the same side, made during the morning with short intervals every quarter of an hour.

Ulcer from Irritation of Nails.—Mr. Ure applies a hot saturated solution of alum continuously to the part. This induces rapid absorption of the thickened cuticle and prompt cicatrization of the ulcerated surface.

PART FOURTH.

AMERICAN MEDICAL RETROSPECT.

PRACTICAL MEDICINE.

On the use of Opium and Astringents in Dysentery. By Prof. A. Flint, M.D.—*Opium.* From an early period in the history of medicine, opium has entered into the treatment of dysentery. It would be difficult to find any authority in the medical literature of past ages, for the disuse of opium in this disease. The only difference of opinion has related to the degree of reliance to be placed on it, and the liability to injurious effects if given largely. Medical opinions and practice, at the present moment, exhibit the same agreement and differences. Almost every practitioner prescribes opium, to a greater or less extent, in dysentery; some regard it as the chiefly important therapeutical agent in the treatment, and others look upon it as simply adjunctive. It is consequently employed much more freely by some practitioners than by others.

The immediate apparent effect of this remedy is often striking. Sometimes it appears promptly to arrest the disease. Instances of the latter description, however, are not sufficiently numerous to warrant the inference that the remedy has an efficacy which can properly be styled specific. We can readily account for more or less relief of the distressing symptoms of dysentery—the tormina and tenesmus—by the anodyne properties of opium. It is serviceable in another mode, in which, perhaps, consists its chief efficiency, viz., keeping the inflamed part in a state of quietude. It does this by arresting the peristaltic movements, and by relieving the tenesmus so that the patient does not feel impelled to make frequent efforts to evacuate the bowels. The remedy may exert a curative power in other modes which, with our present knowledge, are not understood.

To secure the ends just stated, opium must be given in doses sufficient to produce a decided impression. Experience teaches that the quantity requisite to produce the desired effect differs widely in different persons, and in different diseases, irrespective of pain. This is a very important practical point. A dose of opium which affects one person in a sensible manner, has little or no apparent effect on another person under similar circumstances; and in some diseases in which pain is not a prominent symptom, there is an extraordinary tolerance of this drug. The latter appears to be true of dysentery. Opium

may be given, in some cases, at least, of this disease, in large doses without any manisfestations of its narcotic properties; and it *must* be given in large doses to secure the desired remedial effects. I have known twenty-four grains of the sulphate of morphia to be taken in twenty-four consecutive hours, by a patient not habituated to the use of opium, with no evidence of narcotism, nor could this quantity be diminished without marked aggravation of the symptoms.

Bearing in mind the differences in susceptibility to the remedy, it is of course highly important to avoid any risk of too great narcotic effect. This is to be done by increasing the doses, by degrees, up to the requisite amount, allowing intervals between them sufficient to estimate the effect of each dose.

Taking into view the *modus operandi* of opium (so far as it is explicable), we can understand why its good effects may be more marked, after free purgation. The intestine is more likely to remain in a quiescent state in proportion as it is free from fecal contents to excite peristaltic movements, and provoke acts of defecation.

The different preparations of opium may be employed according to circumstances. Those which are most prompt in their action are preferable, in order that the effects of each dose may be better estimated. Concentrated preparations are also frequently retained, when those more bulky are rejected by vomiting. The salts of morphia are particularly eligible in cases in which irritability of the stomach exists. Opium in tincture, or aqueous solution, and the salts of morphia, given by enema, often have a very happy effect. Frequently this mode of administration is ineffectual in consequence of the speedy expulsion of the enemas. This is very apt to occur in the course of the disease after their frequent repetition; and sometimes, under these circumstances, to persist in their use is injudicious, the irritability of the rectum being increased by them, and the efforts of defecation rendered more frequent and painful than would otherwise be the case.

Other injections are employed in dysentery. A strong solution of the nitrate of silver sometimes appears to allay the tenesmus, and render the dejections less frequent; in other cases it produces no such effects, and sometimes occasions severe pain. As a local application to the inflamed mucous surface, its action must of course be very limited, especially if the injection be made into the rectum alone. Carried higher up into the intestinal canal by means of a long tube, it may be brought into contact with a larger portion of the affected surface, but even by this mode its action must still be limited. I cannot speak of the latter mode from personal trial of it. Creasote, in mixture, appears, in some instances, to allay the irritability of the rectum. Strong testimony is borne, by numerous practitioners, to the relief afforded by large enemas of simple cold water, repeated more or less frequently.*

Astringents.—Various astringent medicines are in common use in

* In a case, coming under observation since this was written, in which hemorrhage from the bowels occurred after the dysenteric symptoms had greatly diminished, enemas of cold water appeared to produce a decided effect in arresting the flow of blood. They were also grateful to the patient.

dysentery, viz., the acetate of lead, the nitrate of silver; and, of vegetable astringents, a great number such as tannic acid, rhatany, kino, catechu, etc. These are very rarely, if ever, relied upon to the exclusion of other remedies, and they are usually given in connection with opium. It is, therefore, difficult to estimate the effect which belongs to them separately. The impression formed from my own experience is, that they are comparatively of small utility. It is desirable that the utility, or non-utility of this class of remedies should be determined, because, in the first place, if useful, it is important not to deprive ourselves of their aid; and, in the second place, if not useful, although directly they may not be injurious, they are likely to prove so, indirectly, by appropriating a certain portion of that dependence which otherwise we should place on remedies more efficient for good. —*Clinical Report.*

On Treatment of Rheumatism in New York Hospital. By J. B. Chapin, M.D. Resident Physician.—The plan of treatment usually pursued was: If the patient presented himself with unusual excitement of the skin and pulse, to administer a mixture of sulphate of magnesia and tartarized antimony until the skin was relaxed, and the pulse reduced to a more natural standard. The Rochelle salt was then directed in drachm doses, every two or three hours during the day time, till the urine was rendered alkaline, when it was gradually suspended. A lotion of carb. potass. ℥ j. with opium ʒ ij. to the pint of water, was directed as an external application. The administration of the salt was not attended with disagreeable consequences, with the exception occasionally of some ulceration about the fauces,—in no case was its action so severe upon the bowels as to require its entire suspension. The persons attacked were in the full vigor of health, and the character of the disease acute in its form. The frequency of administration of the remedy was governed very much by the reaction of the urine.

On the admission of the patient, the urine was tested, and, in all cases, was found to be of acid reaction, and the secretion of the skin presented the usual acid odor. The treatment was generally commenced the second or third day after admission, and the urine was rendered of decided alkaline reaction in an average of five days after its commencement; the longest period it resisted the alkaline reaction having been twenty days, and the shortest two. The secretions of the skin have not, I believe, been noticed to alter. In one case, attended with profuse perspiration, which yielded readily to treatment, the colored shirt the patient wore entirely lost its color; and it was suggested whether the same change did not take place in the perspiration as in the urine. The average amount of the salt administered was from five to seven ounces.

The average date of commencing improvement was seven days after commencement of treatment, coinciding, in the large majority of the cases, with the commencing alkalinity of the urine. The improvement was invariably permanent, and after the urine was rendered alkaline, *no new articulations were affected*, as a general rule.

The average period of convalescence was twelve days after admission,

and the whole duration of the disease, including the period previous to admission, was twenty-two days. Of thirty cases treated by Dr. Swett, during April and May 1853, during which time no uniform course of treatment was pursued, the average duration was five and a half weeks. One of the most gratifying results of the alkaline treatment was the diminished frequency of cardiac complications. Twenty-one of the twenty-five were free from any complication, three were *admitted* with aortic obstruction, and one with mitral regurgitation. Not one patient was attacked with any heart complication during the treatment of the disease. Comparing this result with the practice last year, it was found that four had mitral regurgitation, six aortic complication, and three suffered from pericarditis; thirteen in all, out of thirty.—*N. Y. Med. Times.*

On Imaginary Diseases. By STEPHEN W. WILLIAMS, M.D.—Some of the most distressing complaints to which humanity is liable, are diseases of the imagination. They are a species of monomaniac insanity, frequently beyond the reach of medicine, and often beyond the acutest reasoning of the physician and the divine. They not unfrequently lead to the most depressing melancholy, to despair, and even to suicide. They also often lead to actual disease, particularly of the chylopoietic viscera. Imaginary hallucinations, however, sometimes lead to pleasurable sensations, as in the case of the man who fancied himself to be the Lord and Saviour of the world, who was tried before Lord Erskine. This phantom of the imagination must only be productive of pleasurable sensations, during its continuance. How many men have fancied themselves to be Presidents, Kings, and Emperors, Generals, and Commanders of armies, and have led their soldiers on to victory. But I will proceed to the relation of a few cases, which have fallen under my observation.

A patient called upon me a few years ago, who fancied that he had the venereal disease from cohabitation with a cow—he was a simple fellow, and was much alarmed about himself. The complaint had been upon him four or five years, or he fancied that it had. He called upon a noted empiric in a neighboring city. He saw him but a few minutes, and gave him some medicine, for which he charged him fifty dollars. He paid him nine dollars, all the money he had with him, and for more than three years he continually dunned him for the remainder, till he paid no attention to his letters, although he threatened to sue him. I had another patient in the same region, whom he treated in a like manner. I ascertained to my own satisfaction that the only actual disease he had upon him was occasioned by masturbation, though he fancied that he still labored under the venereal disease. I assured him that he was cured, but I never could make him believe it, and I was obliged to give him some little placebo or nostrum, to satisfy his mind. He called upon me once in about three months, for the space of five or six years. He died some time in the course of the year 1853, but, as he lived some distance from me, I did not see him in his last sickness, and do not know of what complaint he died, though, I believe, it was pneumonia. So far as my observation goes, the venereal disease has never been known to prevail among animals.

Shortly afterwards, I had another patient who fancied that she took the venereal disease twenty-two years ago, from washing the linen or making the beds of two young men, who she imagined had that complaint. It was never known that they had the disease; on the contrary, it was almost certain that they never had it. She never knew any thing about the venereal disease until six years afterwards, when she accidentally heard some old woman talk about that complaint, and afterwards she fancied that she took it six years before, in the manner described. The delusion lasted but a short time, and she married soon afterwards and had three children. The two youngest died either in the birth or soon after. Just before the birth of the last child, she fancied that she had the same complaint, but she said nothing to me about it. Her child died when two or three days old, and she mourned herself almost into a state of derangement, in consequence of it. She fell under the care of another physician, who, for a biliary derangement salivated her severely. She was then about 40 years of age. Some time afterwards she fancied that she was pregnant again, when, in fact, the irregularities of her menstrual flux were owing to the critical period of her life. Her old vagaries returned upon her, and she firmly believed that she had the venereal disease from the same cause. I could not reason her out of it, and as she had fretted herself into sickness, she persuaded me to put her upon a course of mercury, which I told her would probably cure her, as it was almost or quite, a specific. My principal object was to induce a new disease upon her, and turn her attention from the subject of her delusions. I also believed it would be of service to her on account of her biliary affections. I salivated her, and I thought I should hear no more about her old complaints. But they soon returned upon her imagination with violence. I knew that her delusions were in consequence of mental derangement, as her grandfather, mother, and sister had previously been afflicted with mania. She was willing to go to the Insane Hospital, and her husband soon after carried her there. She was benefited for a while, by her residence there, but soon after her return home she relapsed again, and again went to the hospital, and again regained her health, both mentally and bodily. She has now been with her family several years, without any return of her complaints.

A short time ago, I was called in haste to a young man not far from 22 years of age, who had partially castrated himself by removing one of his testicles with a razor. His intention was to remove both of them, but he bled so profusely that he was deterred by it. He lost an enormous quantity of blood, and I was obliged to tie the spermatic arteries as soon as possible, which I found very difficult to do, on account of the retraction of the cord. He had been troubled for more than a year with involuntary seminal emissions, which weakened him very much. He had a fever a little more than a year before, which left him quite debilitated, and he had not entirely recovered from it. He was told by one of his confidential companions, that he could never be cured of the complaint in any other way than by castration. He was also told of a young man in a neighboring town, who was afflicted in the same way, and that he performed the operation of castration upon himself,

and was cured by it. This was the cause of this young man's resorting to this fool-hardy and dangerous act.—*N. J. Med. Reporter.*

Conclusions regarding Yellow Fever, deduced from the Epidemic of 1853. By Prof. J. L. RIDDELL M.D.—1st. That our Yellow Fever of 1853 has not been personally contagious; that the poison, virus or material cause producing it, does not emanate in an active condition from the person of the patient laboring under the disease.

2d. That the disease has been marked by characters of infection and infectious communicability, the poisonous matter (doubtless some species of living organism) maturing its germ or spores on the surface of solids devoid of life, surrounded by confined or impure air; which germs become diffused in the impure atmosphere.

3d. Three peculiar conditions seem to favor the development of the infection. 1st. The absence of ozone, the great chemical promoter of oxidation, which absence permits the undue development of obscure cryptogamic life. 2d. Abundant emanations from decomposing and disintegrating organized matters, complex products, gaseous, liquid, and solid, the papulum or blastema of cryptogamic growths. 3d. The presence of the specific organism, whose perfected spores constitute the material cause of Yellow Fever.

4th. That the towns and plantations of the Southwest have this year derived their Yellow Fever from New Orleans.

5th. That although black vomit fevers or types of yellow fevers may perhaps originate in this region, yet that the germs of our epidemic of 1853, have probably been derived from countries further South.

6th. That the mixture of equal parts by weight, of black oxide of manganese, sulphuric acid and water, which in the cold will continue for many days to develop ozone, promises to be the most convenient, most economical and most efficient disinfectant ever used; and therefore deserves hereafter a fair trial.

7th. It is proper and feasible for New Orleans to have some kind of quarantine in certain months of the year, which will exclude filthy persons, filthy clothing, and filthy ships, until they are fumigated; and goods from West Indian, South American and Mexican ports, until they are fumigated.

8th. The city should be kept cleaner than heretofore, by efficient drainage, and sanitary regulations carried into effect.

9th. Legal ordinances should be framed and carried into effect, to prevent the undue huddling together of human beings within the limits of the city.—*N. O. Med. and Surg. Journal.*

SURGERY.

New Mode of Treating Un-united Fractures of the Humerus. By Prof. F. H. HAMILTON, M.D., of Buffalo.—It is the universal practice, so far as I know, in dressing fractures of the humerus, to place the forearm at right angles with the arm. Within a few days, and generally, I think, within a few hours, after the arm and forearm are placed in this position, a rigidity of the muscles and other structures has

ensued, and to such a degree that if the splints and sling are completely removed, the elbow will remain flexed and firm; nor will it be easy to straighten it. A temporary false anchylosis has occurred, and instead of motion at the elbow joint, when the forearm is attempted to be straightened upon the arm, there is only motion at the seat of fracture. It will thus happen that every upward and downward movement of the forearm will inflict motion upon the fracture, and inasmuch as the elbow has become the pivot, the motion at the upper end of the lower fragment will be the greater in proportion to the distance of the fracture from the elbow joint. No doubt it is intended that the dressings shall prevent all motion of the forearm upon the arm; but I fear that they cannot always be made to do this. I believe it is never done when the dressing is made without angular splints, nor is it by any means certain that it will be accomplished when such splints are used. The weight of the forearm is such when placed at right angles with the arm, and encumbered with splints and bandages, that even when supported by a sling, it settles heavily forward, and compels the arm dressings to loosen themselves from the arm in front of the point of fracture, and to indent themselves in the skin and flesh behind. By these means the upper end of the lower fragment is tilted forward. If the forearm should continue to drag upon the sling, nothing but a permanent forward displacement would probably result. The bones might unite, yet with a deformity. But the weight of the forearm under these circumstances is not uniform, nor do I see how it can be made so. It is to the sling that we must trust mainly to accomplish this important indication. But you have all noticed that the tension or relaxation of the sling depends upon the attitude of the body, whether standing or sitting—upon the erection or inclination of the head—upon the motions of the shoulders, and in no inconsiderable degree upon the actions of respiration. Nor does the patient himself cease to add to these conditions by lifting the forearm with his opposite hand, whenever provoked to it by a sense of fatigue.

This difficulty of maintaining quiet apposition of the fragments while the arm is in this position, at whatever point the arm may be broken, become more and more serious as we depart from the elbow joint, and would be at its maximum at the extreme upper end of the humerus, were it not that here a mass of muscles, investing and adhering to the bone, in some measure obviates the difficulty. Its true maximum is therefore near the middle, where there is less muscular investment, and where, on the one hand, the fracture is sufficiently remote from the pivot or fulcrum to have the motion of the upper end of the lower fragment multiplied through a long arm, while on the other hand it is sufficiently near to the armpit and shoulder to prevent the upper portion of the splint and arm dressings from obtaining a secure grasp upon the lower end of the upper fragment. It must not be overlooked that the motion of which we speak belongs exclusively to the lower fragment, and that it is always in the same plane, forwards and backwards; but especially that it is not a motion upon the fracture as upon a pivot, but a motion of one fragment to and from its fellow. This circumstance I regard as important to a right apprecia-

tion of the difficulty. Motion, alone, I am fully convinced, does not so often prevent union as surgeons have generally believed. It is exceedingly rare to see a case of non-union of the clavicle. Of forty-seven cases of fracture of the clavicle which have come under my observation, and in by far the greater majority of which considerable overlapping and consequent deformity has resulted—of this number only one has resulted in non-union, and in this instance no treatment whatever was practiced, but from the time of the accident the patient continued to labor in the fields and hold the plough as if nothing had occurred. I have therefore seen no case of non-union of the clavicle where a surgeon has treated the accident. Indeed, what is most remarkable, its union is more speedy, usually than that of any other bone in the body, of the same size. Yet to prevent motion of the fragments in case of fractured clavicle with complete separation and displacement, except where the fracture is near one of the extremities of the bone, I have always found wholly impracticable. Whatever bandages or apparatus I have applied, I have still seen always that fragments would move freely upon each other at each act of inspiration and expiration, and at almost any motion of the head, body, or upper extremities. It is probable, gentlemen, that you have made the same observation. From this and many similar facts I have been led to suspect for a long time, that the motion has had less to do with non-union than was generally believed.

I find, however, no difficulty in reconciling this suspicion with my doctrine in reference to the case in question; and it is precisely because, as I have already explained, the motion in case of a fractured humerus, dressed in the usual manner is peculiar. In the fracture of the clavicle through its middle third, (its usual situation,) the motion is upon the point of fracture as upon a pivot; although, therefore the motion is almost incessant, it does not essentially, if at all, disturb the adhesive process. The same is true in nearly all other fractures. The fragments move only upon themselves, and not to and from each other. I know of no complete exception but in the case now under consideration. Aside of any speculation, the facts are easily verified by a personal examination of the patients during the first or second week of treatment, or at any time before union has occurred, both in fractures of the humerus and clavicle. The latter is always sufficiently exposed to permit you to see what occurs, and as soon as the swelling has a little subsided in the former case, you will have no difficulty in feeling the motion outside of the dressings, or, perhaps, in introducing the finger under the dressings, sufficiently far to reach the point of fracture. I believe you will not fail to recognize the difference in the motion between the two cases. Such, gentlemen, is the explanation which I offer for the relative frequency of this very serious accident—non-union of the humerus. I know of no other circumstance or condition in which this bone is peculiar, and which therefore might be invoked as an explanation. Overlapping of the bones, the reason assigned by some writers, is not sufficient, since it is not peculiar. The same occurs much oftener, and to a much greater extent, in fractures of the femur, and equally as often in fractures of the clavicle;

yet in neither case are these results so frequent. Nor can it be due to the action of the deltoid or of any other particular muscles about the arm, whether the fracture be below or above their insertions, since similar muscles, with similar attachments on the femur and on the clavicle, tending always powerfully to the separation of the fragments, occasioned only deformity, but not non-union.

If I am correct in my views, we shall be able sometimes to consummate union of a fractured humerus where it is delayed, by straightening the forearm upon the arm, and confining them to this position. A straight splint, extending from the top of the shoulder to the hand, made of some firm but moulding material, and made fast with rollers, will secure the requisite immobility to the fracture. The weight of the forearm and gland will only tend to keep the fragments in place, and if the splint and bandages are sufficiently tight, the motion occasioned by swinging the hand and forearm will be conveyed almost entirely to the shoulder joint. Very little motion, indeed, can in this posture be communicated to the fragments, and what little is thus communicated, is a motion which experience has elsewhere shown not disturbing or pernicious, but a motion only upon the ends of the fragments as upon a pivot.—*Buffalo Med. Jour.*

On Scirrhus, and Fungoid Affections of the Female Mamma. By Prof. J. P. Mettauer, M.D.—The recent report in regard to "the results of surgical operations in malignant diseases," of Dr. Gross, chairman of the committee appointed by the American Medical Association, to examine into and report upon that subject, does not accord with my experience in the treatment of those affections. I have extirpated 42 mammæ, 28 of them affected with scirrhus, and 14 with fungoid. Of the 28 cases of scirrhus, 15 were in a state of ulceration, and 13 without the slightest ulcer, or disposition to it. Of the 14 cases of fungoid, 8 had ulcerated, and 6 had not. Of the 42 cases, 28 were perfectly cured, and, at the date of this paper, continued well—more than three years now since the last one was operated on. Of the successful cases, 19 were scirrhus and 9 fungoid disease.

One of the cases alluded to, commenced as scirrhus, and finally, after three years continuance, ulcerated. When the patient came under my care, the ulcer had existed six months. I found the whole mamma implicated and somewhat enlarged, and three large axillary tumors, one about the size of an ordinary peach. The subject of this case was a negress about 47 years old, and when she was placed under my management, had become considerably emaciated. Her previous health had been very good. She had borne several children, but for 15 years had been sterile.

The mamma was naturally large, and although the ulcer was quite extensive, a sufficient flap on each side of the incision was preserved, and of healthy integuments, to cover the wound without much traction. The entire mamma, and the three axillary tumors were removed in the ordinary way, and without much difficulty. The wound was closed with sutures and adhesive plasters, as is common; and the water dressing, with a suitable bandage, was employed. The bowels were purged

daily, until all danger of traumatic fever had passed. The case recovered rapidly; and in 14 days, the patient left the infirmary entirely well.

In the course of 10 months, this woman returned to the infirmary with a second tumor, in the exact situation of the first, and fully as large. It was in an ulcerating condition, and very much in all respects, of the same shape and appearance as the one upon which I had operated. There were also two tumors in the axilla, one fully as large as the largest of the first. Had I not removed, in the first operation, the entire mamma, it would have been difficult for me to be convinced that the present was not a disease of the mammary gland, so closely did it resemble the first tumor. The general health had become much impaired. There was considerable emaciation. This tumor was quite hard, but less so than the first. Its growth had been exceedingly rapid since it had attained the size of an egg. The disease reappeared along the line of union in five distinct places—and nearly at the same time—as small tubercles about the size of a large shot, unattended with pain, and were exclusively located in the cicatrix. As these tubercles enlarged, they amalgamated, involving the contiguous parts. The disease, as already stated, had existed 10 months, when the woman returned, yet the axillary swellings had only been perceived two months previous to that time.

These tumors were again extirpated, not, however, without considerable difficulty, especially those of the axilla, by reason of their close connection with the axillary vein and artery. They were removed, and the extensive wound resulting being managed as in the first instance, speedily healed up. In 18 days the cicatrix was perfectly formed.

For two months after the healing of the wound, every thing went on most favorably. The general health had greatly improved. At this time, three small tubercles made their appearance, at different regions of the cicatrix, resembling, from the description I received of them from an intelligent individual, the first that appeared. Without delay they were extirpated, and I took care to remove, with each one, a liberal portion of the surrounding structures. The wounds were closed in reference to union by adhesion, and a speedy cure. The water dressing was also employed, to prevent undue inflammation, and the bowels purged daily for three days, as auxiliary to that agency. In 12 days the wounds healed perfectly.

After this operation, the tubercles reappeared, and were extirpated six times,—the woman having submitted to *nine distinct operations*—two of which were exceedingly severe and painful. The ninth operation, however, seemed to remove the last vestiges of the disease; and the woman now, (seven years since,) is well and entirely free from any suspicion of a return. The disease, in its first appearance, undoubtedly was scirrho-cancer; but in its reappearance, it assumed a fungoid appearance; and such alteration I have thrice observed in cancer of the female breast. How far the want of the mammary gland may have influenced the disease, in reappearing, to assume the fungoid form instead of scirrhus, I am not prepared to state; but in the three in-

stances in which it did put on that form, it succeeded the removal of the mamma for scirrhus.

This case is interesting in several aspects. It certainly was interesting to the patient and surgeon, as it caused the woman great suffering, and the surgeon not a little trouble. But its chief interest relates to the precedent it furnishes, in deciding upon, or rejecting operative procedure, in cancer and fungoid diseases of the female breast. Had no operation been performed, this woman certainly would have died. If the reappearing tubercles had not been extirpated, there is not the slightest reason to doubt that they would have resulted in tumors of the nature of those operated on; as they were of the same form and appearance, and originated in similar locations. The remarkable recovery in this case was due, evidently, to the frequent operations; and from repeating them when the tubercles were small, and before the surrounding textures became implicated. And, it is probable, if a like mode of operating were adopted in the treatment of scirrhus and fungoid, located in other organs of the body, they would more frequently be cured. I ascribe my success, in the treatment of these diseases, only in part, however, to the mode of operating described, in the case in question. An important item with me, in the management of such patients, is the constitutional treatment generally pursued with them, after recovering from the operation. And this treatment consists of aperients; the occasional employment of mercurials to improve the condition of the secretions generally, but more especially the biliary; the nitro-muriatic acid mixture; tonics, both mineral and vegetable; the cod-liver oil; in some cases iodine and mineral tonics; a well regulated diet; narcotics, if needed; and free exercise in the open air, if it will not expose patients to catarrhal affections, or to exhausting fatigue; and the treatment should be perseveringly continued. I believe that these discouraging and too often incurable diseases have often proved fatal, by reason of an unwillingness with surgeons to meddle with them, and a disposition to advise unfortunate patients against active surgical measures; when, if an early resort to extirpation had been proposed, and carried out in practice, many lives might have been saved. A refusal on the part of patients, too, to submit to the repetition of surgical operations in these cases, more especially if discouraged by friends, and not unfrequently by their medical advisers, also, has, in many instances, consigned individuals to the grave who could have been cured; and the case here referred to, is an instance in point. This woman was advised by her friends not to submit to a second operation; but I urged her to adopt the contrary course. She heeded my advice, and her life was saved. These tumors kill, generally, if left to themselves. By extirpating them early, before the constitution becomes recontaminated, and while the disease is, in a great degree, local, the only rational chance for a cure is afforded. My rule, now, is to operate in every instance, unless the disease is already manifesting itself as a pervading constitutional affection; or the patient is too feeble to sustain an operation; and, to repeat it as often as the disease reappears, as early as possible after its return; and to continue to do so until the fell disease is hunted down and eradicated from the system.—*Virginia Medical and Surgical Journal.*

Case of Osteo-Aneurism. Two Operations. Death. By Prof. P. F. Eve, M.D.—The patient was from Marshall County, this State; was a farmer, about 60 years old; who, a year before his application to me, had detected, while combing his hair, a tumor over the left parietal bone. When pressed for its cause, he had an indistinct recollection of a slight blow on that side of his head three months before its appearance, from the limb of a tree. But this was so slight, he merely mentioned it, knowing no other source to which to attribute its production. I think the aneurism probably had no connection with external violence, but arose from an intrinsic cause, disease in the vascular system of the bone affected. As the tumor increased in size, the patient began to be annoyed by a peculiar sensation in it, which led to the detection of its pulsation; he became too, a little deaf.

It was just twelve months after the aneurism was first observed, that the patient came to Nashville; having already consulted the profession pretty extensively, both personally and by letters. The tumor now measured fifteen inches in circumference; to protect it and somewhat restrain its growth, a leaden cap was worn, the edge of which, by pressure, had depressed the integuments all around it, and of course acted upon the occipital artery, and posterior branch of the temporal. There was distinct pulsation throughout the swelling, but it was not very forcible; and a vibratory thrill was noticed upon auscultation. Pressure upon the arteries of the scalp made no perceptible change in its circulation. The general health of the patient was good; he possessed a cheerful disposition, but was exceedingly anxious about his affection, and often expressed the opinion it would destroy life.

By arrangements, Mr. V. returned to the city after a brief visit home, and was subjected to the following operation on the 8th of November last. With a curved needle, ligatures were deposited under the courses of the posterior branch of the temporal and occipital arteries, and these were tied tightly over compresses—twelve long pins (not the common, but bought in Paris), were next thrust into different parts of the aneurism, with the design of coagulating its contents. The patient was placed upon a rigid diet; requested to keep quiet; to be freely purged with salts; and to have ice applied to the tumor. I have very little doubt, had this treatment been faithfully carried out, but that it would have been successful, so far as to have coagulated the blood, at least, a portion of it circulating in the aneurism. Unfortunately, it was just at that season of the year when ice could not be obtained, and the patient becoming restless, determined to return home, in spite of all entreaty to remain in Nashville. An impression was made upon the affection, I think, chiefly by the pins, though it still pulsated, but less distinctly; and with much reluctance, these were now all removed, with the two ligatures, at the end of three days, and this treatment entirely abandoned. Mr. V—— declaring he was peculiarly constituted in this respect, and home he would and must go.

On the 19th of the same month (Nov.), I again operated on our patient, now at his own residence. The two arteries of the scalp passing in the direction towards the aneurism, were exposed by incisions and ligated, but without making any impression upon its pulsation.

As it had once been punctured by the family physician, who was now present, and that without much hæmorrhage, an opening was cautiously made into the tumor, and the finger introduced came immediately in contact with large, loose spiculæ of bone, one compared even in width to the finger. To verify this unexpected condition in the case, Drs. Johnson and Kennedy, two excellent professional gentlemen, and who had seen most of it, were requested to examine this new feature in its diagnosis, and did so; though at the expense of some hæmorrhage, for the circulation in the part was exceedingly active. Finding it impossible to restrain the bleeding, which threatened to be fatal, by lint thrust into the aneurism, or by compresses upon it, four or five pins were passed through the edges of the divided scalp, and ligatures twisted around them. This, fortunately, promptly and permanently arrested it.

When the patient fully recovered from the effects of chloroform, he was made acquainted with the true nature of his affection, and apprised of the fact that death was almost certain in his case, either from hæmorrhage or inflammation of the brain. Morphine was given pretty freely immediately after the operation. On the second day he had some inflammatory reaction, which was relieved by purging with salts. On the third day he had very little fever, no delirium, but complained of some pain in his shoulders and arms. During the night of the fifth he became speechless, and died just as he was entering upon the seventh day from the operation. The dressing to the aneurism had not been disturbed, nor had the least hæmorrhage occurred. The patient very evidently died from inflammation of the brain, caused by the operation. No *post mortem* examination was permitted.—*Nashville Jour. of Med. and Surgery.*

Schirrhus Tumor of the left Tonsil. Removal. By Prof. Eve.—This production was congenital in a negro boy now aged eight years, and had acquired the size of a turkey's egg; it would have weighed several ounces.

The patient came from Hickman county; presented no symptoms of scrofula, but was apparently healthy, with the exception of a large sub-maxillary tumor on the left side. It was not attached to the skin, was firm and resisting, smooth on the surface with a slight depressing line running in its longitudinal direction. The tonsil on that side projected between the half arches, and the root of the tongue was also slightly inclined to the opposite side.

By careful incisions the facial vein was avoided, but the artery was necessarily divided, and the sub-maxillary gland included in the removal of the diseased mass. It was found not practicable to dissect this from the tonsil, and drawing it outwards and forwards, it was cut off from the attachment to this organ. After applying ligatures to three vessels, a sponge was made to fill up the space now left vacant. This was removed in twenty-eight hours, and by simple dressings, the parts have nearly healed up within three weeks, when the patient leaves the city to-day for home. I learn he has fully recovered.—*Ibid.*

EDITORIAL.

Progress of Cholera in New York.—In pursuing further the object contemplated in our last number—a general statement of some facts developed by the present epidemic of cholera in this city—we present our readers with a continuation of the tables of the comparative mortality of the epidemics of 1849 and 1854. One of the interesting facts which these tables show, and which must attract the attention of the most casual observer is, that the *periods of greatest intensity of both epidemics are consonant*, or in other words, that the disease, in each epidemic, arrived at its climax during the tenth week from its commencement. Now if we compare these tables with those published in our number for Nov. 1849, we find that in Philadelphia and Boston, the epidemic of 1849 was likewise ten weeks arriving at its *acme*. It would be interesting to follow out this point in reference to the epidemic at present prevailing in each of those cities, but as the material for such purpose is not at hand, we are prevented from doing so. That there is a fixed law governing the rise and progress and decline of cholera epidemics under all similar circumstances, is certain. In all the large cities and manufacturing districts of England, in the epidemic of 1848–9, this fact was strikingly illustrated, as will be seen by consulting the Report on cholera by the Royal College of Physicians of London.

But there is another fact developed from these tables, which is worthy of the attention of the reader. It is frequently asserted that during the prevalence of an epidemic, all diseases which are cognate, are swallowed up by it, or in other words, that while cholera prevails, all diarrhœas and dysenteries are prodromes of the disease, and should be considered as a portion of it—"that diarrhœa is cholera." We see no reason why such a belief should prevail. The tables show the usual mortality from bowel diseases, in addition to the choleric disease. In fact, they show more than the usual amount of deaths from diarrhœa and dysentery; and would lend color to a suspicion that we have prevailing in our midst at least two, if not three epidemics. That the characteristics of the diarrhœa of cholera are well marked, needs no argument to prove; no one who has observed an epidemic of cholera will have failed to notice that the stage of diarrhœa is as well marked, and as easily defined, as either of its other stages, and that in all its phases, it presents characteristics entirely distinct from the ordinary diarrhœa or dysentery, which now prevails coexistent with it.

The increase in the number of deaths, from the four bowel affections, noticed in the first table, has so to speak, further confirmation in the fact, that for several years past there has been a gradual increase in the mortality from diarrhœa, dysentery, cholera morbus, and cholera infantum, diseases, the sum of the mortality from which, is greatly augmented by the decided influx of immigrant population—a class peculiarly prone to these affections. That both cholera and the diseases just mentioned have not been particularly rebellious to treatment, will, we think, be readily acknowledged by all who have become practically acquainted with the present epidemic.

On referring to the following table it must be borne in mind that the epidemic of 1849 commenced during the week ending May 19, while that of the present, dates from the week ending June 3d, or three weeks later in the season.

1849.									1854.								
Week ending	Total Mortality.	Cholera.	Chol. Infantum.	Cholera Morbus.	Diarrhœa.	Dysentery.	Other Diseases of the Bowels.	Tot. from Chol. & Dis. of Bow'ls.	Week ending	Total Mortality.	Cholera.	Chol. Infantum.	Cholera Morbus.	Diarrhœa.	Dysentery.	Other Diseases of the Bowels.	Tot. from Chol. & Dis. of Bow'ls.
J'ne 16	425	145	5	13	4	1	15	183	July 1	517	78	29	13	23	10	5	158
" 23	473	152	10	10	10	3	16	211	" 8	761	98	74	11	34	20	10	247
" 30	734	286	34	15	17	18	19	389	" 15	817	147	117	17	41	29	7	358
July 7	702	317	31	10	25	25	7	415	" 22	915	183	145	21	47	36	10	442
" 14	991	489	64	18	55	44	15	680	" 29	1139	241	135	26	75	42	8	527
" 21	1409	714	102	34	61	71	29	1011	Aug. 5	1148	302	149	30	70	65	11	627
" 28	1352	692	108	24	49	79	18	970	" 12	1050	278	154	31	65	44	8	580
Aug. 4	1278	678	105	20	54	58	29	946	" 19	992	221	124	17	44	33	11	450
" 11	1011	423	86	19	64	68	23	683	" 26	832	130	126	14	55	44	5	374
Total	8375	3896	545	164	348	366	171	5488	Total	8171	1698	1063	180	484	323	75	3963

In order that our readers may become possessed of the facts which bear upon the diseases to which we have passingly alluded in the foregoing sketch, we present below a table which embraces the yearly mortality from the diseases mentioned, for a period of four years preceding each of the great epidemics of cholera. The per cent. of mortality can be easily computed if we bear in mind that in 1830, the population of this city was, according to the census returns, 202,589; in 1845 it was 371,223; and in 1850, it was 515,394.

	FIRST PERIOD.					SECOND PERIOD.					THIRD PERIOD.				
Disease.	1828	1829	1830	1831	1832	1845	1846	1847	1848	1849	1850	1851	1852	1853	1854
Cholera	----	----	----	----	3513	6	----	----	2	5071	57	----	374	33	
Diarrhœa	110	90	83	142	104	116	202	588	432	783	473	743	567	689	
Dysentery	155	126	128	133	136?	201	284	657	739	1256	792	1193	774	763	
Cholera Morbus	19	14	10	23?	93	19	34	44	43	241	44	102	238	72	
Chol. Infantum	167	119	168	172	334	563	527	692	505	926	713	721	915	922	

The remedial agents that have been most relied upon in hospital practice, consists of camphor, calomel, chloroform, and astringents, for arresting the discharges, after which stimulants, consisting of carbonate of ammonia, mustard, hot air bath, and brandy, as demanded by the exigencies of individual cases. The mortality has been greater, fifty per cent., owing to the impaired constitutions, and advanced stage of the disease, of the cases admitted.

Medical Schools--Session of 1854–5. The season approaches for the opening of the winter session of our Medical Colleges. To these Institutions, now numbering upwards of forty, each having its full complement of teachers, is entrusted the great interests of the profession in this country. They are to give the stamp to the future character which it will maintain whether high-toned, practical, and scientific, or mercenary, empirical, and superficial. Their responsibilities, therefore, are of no ordinary kind, and their claims to patronage should be thoroughly canvassed by every physician who has pupils in charge, to whom he acts as an adviser. Let him consider well the real advantages of the different schools for giving such instruction as he knows from experience they must need, with the qualifications of the various teachers to employ such advantages for the pupils greatest good.

We have frequently spoken of the advantages of New York for medical teaching, and deem it our duty to recur to them again in the annual announcement of the opening of our Medical Colleges.

The most important advantage which mere location can give one Medical school over another, is in respect to clinical teaching. The time is fast approaching when clinical teaching will be deemed an indispensable part of a thorough course of didactic instruction. A growing disposition manifests itself yearly among all ranks of students to obtain access to the wards of hospitals, and learn from actual experience, and apply at the bedside the lessons which they have but indifferently learned in the lecture room. And it is gratifying to witness this increasing estimation of clinical studies, for it is the only true method of graduating a clear-minded, practical class of physicians, who can safely go from the College halls into the active and responsible duties of their profession.

In this single respect, location gives to the Schools of New York, an advantage well worthy of consideration. The materials for clinical instructions at their command exist in the greatest abundance. The immense native and immigrant population that seeks medical advice and assistance at her public charities is without parallel. The following statistics gathered from the annual reports of the several Dispensaries exhibits the number of patients treated at these Institutions during the year 1853. City Dispensary, 46,338; Eastern, 23, 114; Northern, 14,075; Demilt, 9,006; North Western, 4,948, total, 97,481. If we add to this number the patients treated at the different Hospitals, Asylums, etc., the aggregate will not fall below 150,000.

We are aware that this exhibition of figures has little significance, unless this wealth of material is rendered available to the student. Although there is not, we regret to say, in any of our Hospitals or Dispensaries a systematic and well regulated system of clinical instruction, yet no obstacles exist to prevent the student from accompanying the physician or surgeon in his daily rounds of duty, and examining for himself, and acquiring such hints, in regard to individual cases, as will be of infinite value to him in his future practice. These advantages, meagre it is true, when we consider the opportunities for rendering them serviceable to the student, are, neverthe-

less, highly appreciated by him, if we may judge by the eagerness with which he seeks daily the wards of the Hospital. We trust the day is not distant when the present artificial system of instruction will be broken up, and our Hospitals and Colleges will exist as single institutions.

The only changes in the Facultys of the different Schools of New York, as far as we are informed, occur in the *College of Physicians and Surgeons.* Owing to the continued illness of PROF. BARTLETT, the course on Materia Medica in this school will be delivered by PROF. SMITH. PROF. CLARK will unite the course on Practice to that on Pathology, and relinquish the course on Physiology to PROF. JOHN C. DALTON, JR. Dr. Dalton is an experienced lecturer, and successful experimental Physiologist, and this arrangement can but give entire satisfaction to the patrons of the school.

Of the different Medical Schools, whose announcements appear in our columns, the oldest is the *Medical Institution of Yale College.* Founded by one of the most eminent surgeons of this country, Dr. NATHAN SMITH, this College has maintained the very highest character for learning throughout its long career. Existing as the medical department of Yale College, and partaking largely of the literary and scientific character of the parent Institution, its graduates have been numerous and of the highest order of respectability, and have taken high rank in their profession.

Castleton, Vt., Medical College, was chartered in 1818. It has long held a high rank among country schools, and has always called together large and respectable classes. Its faculty for this long period, embraces the names of many of the most eminent men in the profession. In its recent changes, it has made valuable accessions. Two full courses of lectures are now given annually, of four months each.

The *Medical Department of the University of Buffalo* is a young but vigorous school, easy of access to students, and favorably situated in one of the most flourishing and enterprising towns on the western lakes. The College, a model building, is situated in close proximity to the Hospital of the Sisters of Charity, an institution accommodating about a hundred beds, and one of the most admirably conducted Hospitals in this country. The professors of Surgery and Medicine belong to the medical staff of this College, and clinical instruction is regularly given without interfering with the daily course of lectures. Possessed of such advantages with an able and accomplished faculty, the Buffalo School is destined to excel and rank among the very first schools in this country.

The *Geneva Medical College* is the revival of that old and popular school, whose discontinuance we noticed soon after the commencement of its last session. The faculty has been entirely re-modeled with a single exception. We hope their success in re-establishing this School will be equal to their efforts in so praiseworthy an undertaking, and that Geneva College, the worthy successor of the College of Physicians and Surgeons of Western New York, will again be the seat of sound medical learning.

We need not speak of the advantages of Philadelphia, for medical

teaching. She has long had the monopoly of both medical teaching and medical publishing. We wish, however, to notice the changes which have lately been made in the *Pennsylvania Medical College.* The faculty of this school has recently undergone some important modifications which have resulted in the appointment of ALFRED STILLÉ, M.D., to the chair of Practical Medicine, and JOHN NEILL, M.D., to the chair of Surgery. This is the third school in Philadelphia, as regards the number of students; but as respects the character of its faculty and facilities for instruction, it has no superior. The accession of Drs. Stillé and Neill to its faculty, the former Physician to St. Joseph's Hospital, and an accomplished scholar, and the latter Surgeon to the Pennsylvania Hospital, and well known to students by his text books, will give to this school great and deserved prominence.

The *Medical Department of the University of Nashville* is a Southern School, organized in 1850, and bids fair to become one of the most prominent schools in the South. From an able address delivered at the commencement of the term for 1852, by PROF. BOWLING, we learn that its first session opened with the unusually large class of 121 students. In this introductory, PROF. BOWLING presents the advantages of the Nashville School, and its claims upon the south in a strong light, but with satisfactory reasons. Its faculty embraces some of the most popular and honored names in the profession, and aided by the natural advantages of location, this school cannot fail to become one of the most important in the South.

For further information in regard to these schools, we refer to their several announcements.

PROFESSOR PAINE.—We are happy to learn that Professor MARTYN PAINE, of the Medical Department of the New York University, has been elected a Corresponding Member of the *Gesellshaft für Natur und Heilkunde zu Dresden.* He is the first American upon whom the honor has been bestowed.

OBITUARY.

DEATH OF DR. W. J. BURNETT.—Died in Boston, on the 1st of July, Waldo J. Burnett, M.D., aged 26 years, of phthisis. He was an eminent naturalist and a distinguished writer. In a future number we hope to give some interesting particulars of his short, but distinguished scientific career.

DEATH OF DR. I. GREEN.—Died at Cornwall, N. Y., on the 3d of July, Isaac Green, M.D., of this city, aged 38 years. He was a member of the surgical staff of Bellevue Hospital.

DEATH OF DR. J. DENNIS.—Died at the State Emigrant Hospital, Ward's Island, New York, on the 13th of July, Joseph Dennis, M.D., one of the house physicians of said Hospital. He was a graduate of the College of Physicians and Surgeons of this city.

DEATH OF DR. JOSE VARGAS.—Died in this city, on the 13th of July, Dr. Jose Vargas, Ex-president of the Republic of Venezuela, aged 68 years. He held for some time the respective chairs of Professors of Anatomy, Surgery, Chemistry, and President of the University of Caraccas. He was also a distinguished author.

WORKS

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UNIVERSITY OF NASHVILLE,

MEDICAL DEPARTMENT.

The Fourth Annual Course of Lectures in this Institution will commence on Monday, the 30th of October next, and continue till the 1st of the ensuing March.

Robert M. Porter, M.D., General and Special Anatomy.
J. Berrien Lindsley, M.D., Chemistry and Pharmacy.
C. K. Winston, M.D., Materia Medica and Medical Jurisprudence.
A. H. Buchanan, M.D., Surgical and Pathological Anatomy.
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W. K. Bowling, M.D., Theory and Practice of Medicine.
John M. Watson, M.D., Obstetrics and the Diseases of Women and Children.
Paul F. Eve, M.D., Principles and Practice of Surgery.
William T. Briggs, M.D., Demonstrator of Anatomy.

The Anatomical rooms will be opened for students, on the first Monday of October.

A full *Preliminary Course* of Lectures, free to all Students, will be given by the Professors, commencing also on the first Monday of October.

A Clinique has been established, in connection with the University, at which operations are performed and cases prescribed for, and lectured upon, in presence of the Class. Arrangements have been made to accommodate all patients requiring surgical operations.

Amount of Fees for Lectures in the University is $105. Matriculating Fee (paid once only), $5; Practical Anatomy, $10; Graduating Fee, $25.

Excellent Board can be obtained for $3.00 per week. Further information can be obtained by addressing the Dean.

J. B. LINDSLEY, M.D., Dean of the Faculty,
Nashville, Tenn., March, 1854. No. 33 College Street.

LECTURES ON OPHTHALMIC SURGERY.

Dr. M. Stephenson will give his fourth course of lectures on ophthalmic surgery this winter at the N. Y. Ophthalmic Hospital in this city, the introductory to which will be delivered at the University Medical College, 14th Street, on Thursday, Nov. 9th, at 7½ P.M.

TO READERS AND CORRESPONDENTS.

Want of space in the editorial department of this number, compels us to announce in this place the fact that the New York Academy of Medicine offers a prize of one hundred dollars for the best essay on the Pathology and Treatment of Cholera Infantum. The regulations governing the competitors, are those usually offered in the bestowment of literary prizes. Also:—

That Dr. JOHN F. METCALFE of this city, has been elected to fill the vacancy in the Faculty of the Medical Department of the City of New York, occasioned by the death of Prof. J. A. Swett, M.D.

The following works have been received:—

Manual of Human Microscopical Anatomy. By A. KÖLLIKER, Professor of Anatomy and Physiology in Würzburg. Translated by GEORGE BUSK, F.R.S., and THOMAS HUXLEY, F.R.S. Edited, with Notes and Additions, by J. DA COSTA, M.D. Illustrated by three hundred and thirteen engravings on wood. Philadelphia: Lippincott, Grambo, & Co., 1854. 8vo. pp. 802. (From the Publishers).

The Principal Forms of the Skeleton and of the Teeth. By Professor R. OWEN, F.R.S., etc., Author of "Odontography," "Lectures on Comparative Anatomy," etc., etc. Philadelphia: Blanchard and Lea, 1854. 8vo. pp. 329. (From the Publishers.

The Principles of Animal and Vegetable Physiology: a popular Treatise on the Functions and Pneumonia of Organic Life. To which is prefixed a general view of the great departments of Human Knowledge. By J. STEVENSON BUSHNAN, M.D., Physician to the Metropolitan Free Hospital, etc., etc. With one hundred and two illustrations on wood. Philadelphia, Blanchard and Lea, 1854. 8vo. pp. 234. (From the Publishers).

On the Nature, Signs, and Treatment of Childbed Fevers; in a Series of Letters, Addressed to the Students of his Class. By CHARLES D. MEIGS, M.D., Professor of Midwifery and the Diseases of Women and Children, in Jefferson Medical College, Philadelphia, etc., etc. Philadelphia: Blanchard & Lea, 1854. 8vo. pp. 362. (From the Publishers).

A Systematic Treatise, Historical, Etiological, and Practical, on the Principal Diseases of the Interior Valley of North America, as they appear in the Caucassian, African, Indian, and Esquimaux Varieties of its Population. By DANIEL DRAKE, M.D. Edited by S. HANBURY SMITH, M.D., and FRANCIS G, SMITH, M.D. (*second series*). Philadelphia, Lippincott, Grambo, and Co., 1854. 8vo. pp. 985. (From the Publishers.)

Human Physiology: designed for Colleges and the higher classes in Schools, and for General Reading. By WORTHINGTON HOOKER, M.D., Professor of Theory and Practice of Medicine in Yale College. Illustrated by nearly two hundred engravings. New York, Farmer, Brace, and Co., 1854. 12mo. pp. 389. (From the Publishers.

Common Sense, or the Mechanical Pathology and Treatment of Chronic diseases of the Male and Female Systems. By E. P. BANNING, M.D. Fourteenth edition, Revised and enlarged, with 38 illustrations, together with two lectures by the Author. New York, Wilson and Co. 12mo. p. 341. (From the author.)

Transactions of the Medical Association of Southern Central New York, at the Annual Meeting held at Homer, June, 1854. Auburn, 1854. (From CALEB GREEN, M.D.)

On the Construction, Organization, and General Arrangements of Hospitals for the Insane. By THOMAS S. KIRKBRIDE, M.D., Physician to the Pennsylvania Hospital for the Insane. Philadelphia, Lindsay & Blackiston, 1854. 8vo. pp. 80. (From the Publishers.)

☞ We are in receipt of our usual exchange Journals.

☞ Communications intended for publication, and Books for Review, should be sent *free of expense*, directed to Drs. Purple and Smith, Editors of the New-York Journal of Medicine, 183 Hudson-street, *New York*. Persons at a distance may direct parcels, or exchanges, *paid* as above, under cover, to M. J. B. Baillière, Rue Hautefeuille, *Paris;* or H. Baillière, 219 Regent-street, *London;* or Lindsay & Blackiston, *Philadelphia;* or Wm. B. Ticknor & Co., *Boston*. The attention of Correspondents is respectfully requested to the above, as the Publishers are frequently subjected to unnecessary expense for postage and carriage.

All remittances of money and letters on the *business* of the Journal, should be directed to the Proprietors.

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